

In This Issue: PART I

Operational Techniques for Sheltered Work Programs

August, 1961 Volume XXII, No. 8

REHABILITATION LITERATURE

National Society for
Crippled Children and Adults

Review Articles

Book Reviews

Digests

Abstracts

Events and Comments

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REHABILITATION LITERATURE

Article of the Month

Operational Techniques for Sheltered Work Programs

A Guide for Planning and Management

N. P. Smith

Part One of Two Parts

PART I

Preproduction Considerations

THE LITERATURE ON SHELTERED WORKSHOPS provides little practical technical information regarding the methods of business operation. As a consequence we are limited to learning what techniques we can from field trips, conferences, and just plain trial and error.

Certainly field trips and conferences are stimulating and informative. They are an excellent means of encouraging professional growth. An intriguing question, however, is: How much specific shop method can be assimilated while one is being ushered through a rehabilitation center by a busy staff member, no matter how eager he is to provide a full picture of his agency's operations? An important limitation is the fact that the work program is usually only one of several utilized in any rehabilitation program. Also a work program is more difficult to present in concise terms, meaningful to professionally trained personnel, than is social casework, vocational counseling, or selective placement. Basically, rehabilitation workers have a "social work bent" and feel greater response to, and interest in, the assistive techniques that deal directly with the client's problems, psychological, physical, or social. Consequently, when visiting sheltered workshops they probably carry away more concrete information on aspects of the program already better understood than they do on the workshop's business operations *per se*.

Trial and error methods are apt to be very expensive and can damage not only the agency's customer relations but also a basic rehabilitation concept. Inadequate handling of industrial contracts can convince the community's employers that it is *not* good business to employ the handicapped.

About the Author . . .

Miss Smith during 1950-1953 served as supervisor of the vocational project and as senior vocational counselor, Chicago Welfare Department. She received her M.A. degree from the University of Chicago in 1953 and studied rehabilitation counseling at New York University. In recent years she has been shop director, Baltimore League for Crippled Children and Adults; workshop co-ordinator of the Training Center and Workshop of the Association for the Help of Retarded Children, New York City; supervisor of the industrial homework department, which she established initially, of the Federation of the Handicapped, New York City; and director of vocational services, Burke Foundation, White Plains, N.Y. Miss Smith has several years' experience in vocational services and considerable background in industry and the trades.

This original article was written especially for Rehabilitation Literature.

Various types of workshops are in operation today, and only some of them manufacture new goods for the market. This article will deal with business and industrial factors and problems involved in operating sheltered work programs that do manufacturing.

Definition of Sheltered Work Program

For our purposes a *sheltered work program* will be assumed to mean a voluntary organization conducted not for profit but to provide a rehabilitation service for the physically, psychologically, or socially handicapped person by employing him in the manufacture of salable products. Production may be on the basis of primary manufacturing or subcontracting from industry. Such a workshop's objective may be to develop the individual's work potential for

About This Article

Miss Smith's article is to be published in two parts. Part I appears in this issue and Part II will be published in the September issue of *Rehabilitation Literature*. Part I is devoted primarily to the preproduction considerations of *Contract Procurement and Organizing the Physical Plant*. In Part II Miss Smith discusses 1) *Production Control*, 2) *Constructive Supervision*, 3) *Setting Up the Job*, and 4) *Meeting Contract Commitments*.

Miss Smith plans to incorporate the present two-part article in an operational manual on sheltered workshops and home employment programs that will be published soon as an instructional text for professional courses of study and as a guide for personnel engaged in this area of vocational rehabilitation.

eventual placement in industry, to provide continuous employment for the individual on a terminal basis, or both.

Workshops have common obligations and rights:

1) The sheltered workshop has a professional obligation to function so as to demonstrate that *it is good business* to employ the handicapped.

2) The clients, or employees, of the sheltered shop are entitled to pay rates comparable to the usual going rates on each particular operation and are entitled to working conditions that equal or are superior to those found in industry. Where the objective is to move the individual through the shop to placement on the outside, he should be provided with the best technics and tools available. In return, the handicapped worker should be required to maintain as high a quantity of work as is compatible with his limitations. It is an error to coddle the handicapped worker by accepting less than his best effort. Adequate skill and production are not developed by accepting poor

workmanship and low productivity. M. Roberta Townsend¹ speaks of the great disservice we do clients by failing to hold them to high levels of workmanship and production, and she stresses the far-reaching effect of slipshod production methods on prospective employers.

3) The customer of a sheltered shop has a right to expect the organization to follow good business practices in fulfilling its commitments. He should not have to pay an extra dividend because the shop costs more to operate than do those of its competitors, nor should he be asked to excuse failures to meet quality specifications or delivery dates because the manufactured product is of secondary importance to a shop that exists primarily to provide a service for the handicapped. Actually poor performance in meeting commitments means a disservice to the handicapped clients, who will learn to expect to hold a job on the work habits gained in the workshop. How can we hope to develop competent workers if we demonstrate that poor workmanship and low productivity are acceptable? On the other hand, the sheltered shop has a right and a responsibility to get a full price for its work. It is important to remember that the customer is in business to make a profit; he should not be encouraged to increase his profit at the workshop's expense. Therefore, the workshop should avoid accepting prices that are below the industry's average.²

Types of Work

Some sheltered work programs operate partially in primary manufacturing, which does offer the advantage of allowing for full control over raw materials and the scheduling of work to minimize rush and slack seasons. This makes for a greater independence of customer demand. An impressive product provides dramatic public relations material proving the competence of handicapped workers. On the other hand, primary manufacturing involves tying up capital in stockpiles of raw materials that may become obsolete. It necessitates the expense of using design and market specialists and imposes a greater rigidity on the types of work that may be used for training. The work involved may not be representative of the jobs available on the local labor market. Usually sheltered shops doing primary manufacturing can ill afford to enter highly competitive fields, and yet it is possible that these are the very areas providing the largest number of job opportunities.

Primary manufacturing is more satisfactory for the shop that plans to provide continuous employment to a terminal caseload. When the product involved requires high skills, the shop is apt to find that it is essential to retain its skilled workers or be forced out of business. In any case the adequate primary manufacturing shop will sell its products on the open market, without resorting to sympathy appeals because its employees are handicapped.

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It is a fact that many handicapped workers take pride in competing successfully with the nonhandicapped.

The shop that operates on subcontracts enjoys the advantages of not having to own stockpiles of raw materials and of not requiring the use of merchandising and design specialists. It can provide a greater variety in the work it offers its clients, and this work is usually representative of the jobs currently available in local industry. Some drawbacks are a greater dependency on customers and limited control of raw materials and of the scheduling of work. On many contracts, work is subject to busy and slack seasons, but a well-run shop can co-ordinate the slack season of one customer with the busy seasons of others so as to keep a continuous supply of work on hand.

Shops with subcontract work have a greater need for good relations with the customers, who are in a position to observe their operations closely. This may offer several advantages. The customer may make helpful suggestions on specific production processes where his experience is greater than that of the production supervisor. There is no better placement selling device than having a prospective employer observe the competent handicapped worker on a well-run operation. These subcontract shops may find that many contracts available to them belong to the nuisance type of jobs, but a shop meeting industry on its own terms by keeping its commitments will gradually reach the position where it can select only those jobs that meet its own needs to a better advantage.

When the sheltered work program involves industrial homework, it is important to be selective regarding the types of contract acquired. Limits set by homework are considerably more restrictive than the requirements in a workshop. Inspection, job setup, delivery, and pickup are difficult in industrial homework. Legal restrictions are imposed by the state and federal governments. It will be important to be thoroughly versed on homework laws, for it is easy to slip up on some restrictive detail.³ Fortunately labor department personnel tend to be sympathetic with rehabilitation problems and are often helpful in interpreting the laws. Since state and federal laws do not always coincide, it is necessary to check with both labor departments to determine what is permissible for homework programs.

Contract Procurement

It is especially difficult to learn about obtaining industrial contracts through field trips and conferences. Some people have concluded that the technics of contract procurement are jealously guarded trade secrets. What is more probable is that many new workshops obtain their contracts through "playing it by ear" methods and have never had the time or opportunity to formulate their technics, whereas the better established and more successful shops have built up a business following over the

years and no longer consider procurement an important problem. Be that as it may, there are ways of acquiring contracts that are more effective than pounding pavements and blundering into any factory along the way to see what work is available.

The Contact List

The first step in effective procurement is to develop a list of potential customers or contract sources. There are many ways in which a shop may learn about available work. Members of the board will sometimes provide leads, other shops will refer contracts they do not need or cannot handle, or a satisfied customer may recommend the shop to his friends. These means are all subject to chance; the workshop plays a passive role with a rather intermittent supply of work and little control over the types of jobs available to its clients. When a shop wishes to be more selective and wants a constant flow of work, it must assume a more active role and go after its own contracts.

In developing a contact list the shop should be aware of what is offered in the community's newspapers. Severson² suggests that a firm advertising in the "Help Wanted" columns may be willing to relieve his labor problem by contracting work to a sheltered shop and that the "Industrial Space Wanted" columns may be a key to new or expanding firms. The "Business Opportunities" columns will sometimes list available contracts. Or the shop itself may wish to advertise directly, by buying space in the newspapers or in trade or union publications.

The best advertising may be free, in the form of articles describing the shop in terms that will impress the local businessmen with the quality and variety of work done in the shop. Several years ago the Chicago Welfare Department publicized periodic "Open House" days, when industry and the community at large were invited to visit its Industrial Training Section. There is no doubt that this practice was instrumental in increasing the number of contracts on the shop floor and the amount of job placements the agency effected. The number of persons on this sheltered shop's payroll grew from well under 100 to over 500 in a little more than 2 years.

Mailing lists or contact files can be compiled from industrial directories usually to be found in public or business libraries. Large trade shows, as a rule, publish directories of their exhibitors. Directories vary greatly in value as a source of contact information. Points for evaluating the usefulness of a particular directory are: 1) recency of publication, 2) listing of items produced, 3) listing of top personnel, 4) indication of busy seasons by item, and 5) age and size of companies listed.

It is a rare directory that provides all this information, but there are other ways of learning part of it. In seasonal industries busy seasons can usually be determined for the industry as a whole. The state employment service can

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probably provide this information on request. Occasionally a telephone call to the plant can determine the name of the person to be contacted for a particular product.

Other sources of contact leads are the local chamber of commerce and top level personnel in unions and trade associations. The local purchasing agents association is important for this purpose. By attending trade shows the shop representative can make useful connections that may well lead to contracts.

A contact list can be handled efficiently by using a card file. Each card should list the name, address, and phone number of the company, the products manufactured, the specific executive to be contacted for each product, and, if possible, the busy season for each product. The reverse of the card should be used to note date, person with whom contact was made, and the result of the contact. Usually,

item of production, or rush periods when the firm has difficulty in meeting delivery dates may lead to a consideration of contracting work.

Another factor influencing the leads selected is the type of products desirable for the shop at the time. Presumably, in the initial development of the contact list, products generally desirable were favored. Later, if a variety of work is wanted in the shop at all times, the companies selected will be those that can provide types in short supply in the shop.

Contacts with Prospective Customers

In using the contact file one should consider the first approach carefully. Would it be better to start with a personal visit to the plant, a phone call, or a letter? If a personal visit is made without a previous appointment,

XYZ Plastics Corp.	Upton 4-1234
567 John Doe St., Bronx 50, N.Y.	
Plant Mgr.: James Greene	Adv. Exec.: Paul Mann
Pen assembly—year round	Display cards—Aug., Jan.
Toys—June through Dec.	Packaging—July through Jan.
	Mailings—monthly
subcontracts during busy seasons	
Estab. 1924	
Plant capacity—150 employees	
Capital—\$500,000.	

Face of a sample file card, with data recorded for use in contacting a company's executives to procure contracts for work.

however, so much specific information is not available for each firm listed, but the more accurate and current information the contact file holds the more useful a tool it will be.

Selection of Contacts

Before starting to make contacts, the contact list should be reviewed to select companies. Whenever possible, with seasonal industries contacts should be made shortly before the busy season. Another important consideration is: Does the company ordinarily do all its work in its own plant? Usually the best prospects for contracts are companies that make a practice of subcontracting, but, in others, compelling circumstances such as lack of space, a new

the appropriate person may not be available, and, if he is available, he may be too involved with other matters to give the time and attention necessary for the effective selling of the shop's service. Townsend⁴ points out the importance of observing the proper business courtesy of securing an appointment in advance and of being prepared to give a concise story of the shop's capacities. She reminds us that business men have their own problems and that they do not have any time to waste on vague proposals.

When the shop needs work immediately, telephone contacts are definitely indicated. A telephone call provides the opportunity to make an appointment with the appropriate person and reduces the possibility of wasting time

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on a company that will not consider contracting. One can reach more people and get more information faster by telephone than in any other way. Although telephone contact is adequate for immediate needs, its effect is apt to be transitory, as a record of it rarely reaches the company's files.

If the company has no contract immediately available, although something might develop later, an alert field representative will see to it that the call is soon followed by a letter with descriptive enclosures, if they are available. This will remind the firm of the workshop's service and provide material that may be kept on file for future reference. Effectively prepared materials of this sort have been known to arouse a prospective customer's interest to a point where he reviewed his operations to find suitable work to send to the workshop.

Personally I consider mail contact the best initial approach if time permits. It is an economical use of the field representative's time, because he can turn over his selected list of contacts and the materials they are to receive to the clerical staff. The materials used in this type of contact are apt to be filed by firms that normally use contractors. When properly presented, these materials can introduce the shop in a way that will give the customer confidence in its productive capacity.

Letter contact requires a careful consideration of the kind of approach to be used. What type of letter is best in soliciting contracts? Is this the place to play up the social values and objectives of the agency? Or might it not be advisable to meet business on its own ground and in its own terms? The answer to these questions will depend on whether the shop is promoting business or charity. When a workshop is soliciting contracts, it seems only logical to assume that it is promoting business primarily. In that case a concise, clear, and businesslike form letter may get the best results.

If form letters are used it is wise to have several, so the one selected will apply to the particular kind of company. A form letter going to an advertising executive might stress the shop's ability to meet tight deadlines, while one going to an electronics firm would emphasize quality of workmanship. Printed materials playing up the competence of the shop's work make helpful enclosures. In no case should a contact letter be sent that is not addressed to an executive by name. Depending on the firm, he should be the purchasing agent, plant manager, proprietor, or vice president in charge of production.

Effective mail solicitation requires adequate follow-up. Early follow-up may be another letter or a phone call and should take place within 2 weeks of the first contact. Since workshop staff are usually subjected to considerable time pressure and timely personal follow-up on all contacts may not be feasible, it would be advantageous to have form letters prepared in advance for second and even third contacts. This will enable the field representative to

fit phone contacts and field trips into his schedule to a better advantage. Mr. R. H. Macy, who operated the lettershop of the Federation of the Handicapped, New York City, for many years, considers follow-up so important that he advises no contact letters be sent except those that can be followed up adequately. Although follow-up is essential if contact work by letter is to be a productive source of contracts, I have enjoyed the good fortune of being offered contracts by companies that have received my initial letter only. These instances are merely the exceptions that prove the rule, and I usually plan to send only as many letters as I can follow up.

In stressing the importance of a businesslike approach, Max Dubrow, in Jacobs and Weingold,⁵ suggests that all letterheads, calling cards, and brochures be direct, and, when the regular stationery overemphasizes the charitable aspects of the agency's service, a special letterhead be used for contract operations and solicitation. Efforts to procure contracts should not drop off even when a shop has all the work it can handle, for this is the time to seek more desirable types of work and more lucrative contracts or those with a more promising training potential.

Selling of the Workshop's Production

Although letter and phone contacts should never be considered a substitute for personal interviews, they permit a much more efficient use of the field representative's time, by eliminating wasted field trips to firms that do not let work out or do not anticipate using a contractor in the near future. When a plant visit has been preceded by a letter and/or a phone call, the representative is no longer a complete stranger. An added advantage is that work is either available or expected at the time of the visit. When going to visit a plant, the representative needs to know how many average man-hours are available for the processing of new work, so that he can make realistic time estimates. It is very helpful also if he can give rough estimates on price when asked.

The shop representative should always have an appointment with the appropriate person before making a call. He will need to have his sales talk ready. If he is using a business approach, he will want to present the advantages his shop offers its customers in a concise and convincing manner. What are some of the things he has to offer that may lead the customer to use his labor force rather than that of a competitor? In this regard Lammie⁶ says that we must promise the customer production and that we also offer a saving of space for the workers and materials used in connection with the job, savings in taxes, social security, and unemployment insurance rates, record keeping, and payroll costs and through many savings in fringe benefits.

A workshop with a truck or station wagon can pick up and deliver; although an ethical shop will make a fair

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charge for this, it may still benefit the customer in both convenience and cost. There are other savings for the customer in that the workshop trains and supervises the workers and, when these workers become proficient, the workshop will gladly use them in filling vacancies in the customer's plant. There are customer savings also in the costs for inspection when a workshop has built up a reputation for quality workmanship. The satisfaction a customer may derive from making a contribution to the welfare of his community should normally be an extra bonus and not used as a selling point.

Pricing

When a shop or its production personnel has had considerable experience with the work under consideration, it may be possible to set a price on past experience alone. If the shop has kept adequate job specification records, the new contract could be compared with similar jobs done in the past and an adequate price set.

A formula based on motions is most helpful for on-the-spot setting of tentative prices. When making this type of estimate it is wise to bid high; reductions on estimated costs are much more acceptable than are increases. One motion formula, figuring for 1,000 units, is to charge \$4.00 per motion for each motion that takes 7 to 10 seconds. Motions taking less than 7 seconds are combined to approximate this. Those taking more than 10 seconds are counted as 1½ or 2 motions depending on the time required. Motion estimates are best when used on simple jobs. In the lettershop trade all motions are very simple and fast and each is counted as one; charges are at the rate of 50¢ per motion per thousand, including a 50% overhead charge.

In figuring the price to be bid on a contract, consideration should be given to the amount of materials handling involved in the process. It may be advisable to add up to 30 percent of the labor cost as a handling charge. If the workshop takes care of the pickup and delivery, cost for this should be added to the price asked, and when the customer does not provide cartons or packing materials this cost should also be counted.

A fair overhead is a must. In discussing ethics in pricing, Howard G. Lytle⁷ tells of a shop director who boasted that he charged no overhead, as this was covered by his subsidy. Lytle considered this ridiculous and immoral because it meant subsidizing the customer rather than the handicapped worker. An adequate overhead charge is a legitimate cost of production and as such should be included in the price charged to the customer. Dubrow, in Jacobs and Weingold,⁵ offers the following quick formula for figuring overhead:

To get 25%, add 33 1/3% to the cost of direct labor
To get 33 1/3%, add 50% to the cost of direct labor
To get 50%, add 100% to the cost of direct labor

In the example cited, where the unit pay rate was computed at \$.004, the pay rate per thousand = \$4.00. Thus to obtain billing rates:

To get 25% overhead: $\$4.00 + \$1.33 = \$5.33$
To get 33 1/3% overhead: $\$4.00 + \$2.00 = \$6.00$
To get 50% overhead: $\$4.00 + \$4.00 = \$8.00$

The billing rate per thousand to the customer is:

\$5.33 of which \$1.33, or 25%, is overhead
\$6.00 of which \$2.00, or 33 1/3%, is overhead
\$8.00 of which \$4.00, or 50%, is overhead

It has been my experience that the best time studies for determining labor costs are those done in the prospective customer's plant, if free selection of the workers to be timed is possible. When selection is not permitted or possible, those timed may be considerably above average in production level. It is not always possible to determine the validity of the time study under such circumstances. In determining labor cost it is also important to know the going rate for the operation being timed. Some sources for this kind of information are the state employment service and trade unions and associations. Occasionally another trusted customer may have the same operation on his production lines and will provide the information.

Figuring labor cost on a 50-minute hour allows for lost time and fatigue factors and is simpler to use than more technical methods. Since prices are usually specified in dollars per thousand units, labor cost should be determined for one thousand units. Dubrow⁸ points out that the basic labor cost is actually paid to the minimally productive worker in industry; average or high producers tend to receive more. This should be given consideration when doing the time study on contracts with a labor-cost going rate of the legal minimum.

Obtaining materials for a trial run before making a definite commitment is useful. A long enough run will allow some practice and make the timing of workshop personnel a better indicator of a fair labor cost. Practice effect is probably the most difficult variation to evaluate in a time study done on shop personnel. It seems never to be consistent, with respect either to job or to person. Occasionally it may be noticed that, in spite of long industrial experience, workshop personnel have been timed at as low as 60 percent of average industrial efficiency on new types of work. A trial run of sufficient size can help offset this difference; it also allows for experimentation with different job procedures to solve setup problems before actual production is started.

Before a time study is done, breaking the operation down into its elements and eliminating waste motions and handling helps establish the most efficient process. Workers who are timed should have run through the process enough so that they can follow through smoothly. During a practice period they should be observed carefully to work out an element list for the time study. By doing

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this the specific data needed for writing up the job's specifications will be spelled out. While listing elements, one should also be alert for waste motions that should be eliminated. Separate element lists will be needed for each worker to be timed. When timing, jot down the time used for each element as well as the total time for each operation. Element timing will help establish pay rates when the operation is broken down into more than one job; it will obviate retiming the whole operation if changes are needed in the processing. (When payment of wages involves piecework rates or bonuses, it is particularly desirable to know the unit labor cost for each group of elements forming a single operation.) It is essential to time enough workers and sufficient operations per worker to cancel out the more serious variations in production time.

Adequate time study determines accurately the average unit time for each worker. The times for the group as a whole are averaged. Unit cost is obtained by dividing the prevailing hourly rate for the operation by the number of units one worker can produce in an hour.

Confirmation of the Contract

When an agreement has been reached with a customer, good business practice demands a written confirmation of the contract. Immediate written confirmation specifying the exact terms of the agreement will prevent misunderstandings that can result in unpleasantness later. A form letter designed to allow sufficient space for the specifications of the agreement can expedite this matter. This is an inexpensive method of insuring satisfactory customer relations.

The confirmation letter should include precise specifications covering the operations to be performed, packing and shipping instructions, delivery date and quantity, quality specifications, and price. A copy of this letter can be kept in a job file and used as a basis for estimates when considering similar jobs in the future.

Organizing the Physical Plant

Storage

It would be helpful if we could specify the percentage of total shop area that will usually be required for storage, but this we cannot do. The guide to architectural planning⁹ estimates that this will vary from 15 to 50 percent of the work area. Generally speaking, a shop specializing in skilled or semiskilled operations will need less storage area than one that does mostly unskilled hand operations, as packaging. Shortage of storage space is a chronic complaint with the majority of sheltered workshops.

With storage space at such a premium it is imperative that the storage area be organized, or stored materials must constantly be shifted about to get at what is needed. The latter can result in a chaos of misplaced items.

One of the best methods of storing incoming materials is to arrange them in harmony with the production flow lines for the particular contract. When the process of each job is worked out in advance and the sizes of incoming shipments are known, a space can be cleared and organized so that materials can be properly stacked as they are unloaded from the truck. Organized in this way storage can facilitate materials handling while the job is in process and so save the workshop money for more desirable purposes.

A minimum requirement of a storage area is that the space be so organized that shipping and receiving functions have distinct areas. The remaining space might be divided with sections of shelves or bins so that floor storage is isolated by contract. When shelves or bins are used as space dividers, they should be mounted on wheels so that they can be moved without unloading. This will enable the shop to change the size of individual storage areas to accommodate the varying volume of materials on hand.

Planning for Flexibility and Efficiency

The floor plan of a workshop can influence its success with industrial operations to a very great extent. If the layout is inadequate the production process will drag along inefficiently. On the other hand a well-thought-out floor plan will decrease materials handling costs, cut down on the time needed for a given volume of work, facilitate inspection, and save space. A sheltered workshop starts with the handicap of a marginal labor force, which increases its production costs radically. It can ill afford the additional burden of an inefficient plant layout.

Usually the committee who planned or selected the workshop originally have been careful to conform to the legal regulations prescribing standards for manufacturing plants. Even so, alert shop management demands that those responsible for the shop be aware of these standards and request inspection and advice from the appropriate authorities whenever they are in doubt. This is particularly important when changes are contemplated. Important points to be checked are:

- 1) Aisles must be of sufficient width for the safe handling of the expected volume of materials and for easy and safe access by the clients served. Aisles must be kept absolutely clear at all times.
- 2) Safety provisions should extend beyond the requirements of existing laws to provide for the increased emotional impact of stress situations on disabled persons with limited mobility or slower reaction time.
- 3) Adequate lighting should provide increased illumination at work stations; electrical outlets should be placed for convenient use by clients having orthopedic limitations. Electrical cords should never be strung along the floor.

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or where they may interfere with the free movement of workers.

4) Drinking fountains, adequate for the number and type of clients served, should be located conveniently for the work space. If some clients are in wheel chairs, fountains with two spouts, one at a height of 3'6" and the other at 2'6", are advisable.

5) Washrooms should also be located convenient to the work space and should provide:

a) Wash basins 31" in height.

b) Mirrors mounted at eye level. If wheel chair clients are served, eye-level mirrors should be provided for them also.

c) Booths at least 3'10" by 3'10" should be provided in the following ratio:

1 for up to 9 people

2 for up to 24 people

3 for up to 49 people

4 for up to 100 people.

6) A rest room equipped with a couch is a must for any sheltered shop serving the physically handicapped.

To plan an adequate physical plant for a contract workshop is extremely difficult. Usually the people who do the planning or selecting of the plant must work within rigid budgetary restrictions. They are forced to settle for the best space they can afford within a predetermined geographic area. The severest restrictions placed upon them is the common human inability to see into the future and gain some knowledge of the types of work the shop will actually be doing or the size and volume of materials that may be on hand at any one time. Their industrial consultants are in about the same dilemma when asked for recommendations. They can probably estimate to a nicety the space required for a specified number of workers in their own industry, but the sheltered shop will tap many industries and the consultants find themselves working in the dark. Consequently many shops are swamped with space problems once they swing into full operation.

The workshop will have to manage its operation within whatever physical plant has been provided. How well it does this will depend to a great extent on the flexibility and ingenuity of its staff. What they do with the floor plan can make a tremendous difference in the capacity and effectiveness of a workshop. By its very nature each shop will have its own individual needs, which will require consideration in the organization of the physical plant. The ideal functional layout for a given number of workers will not be adequate for the same number of persons at another time when the work being done or the predominant disability being served has changed. For this reason this problem cannot be solved by calling on a plant layout specialist to have ideal floor plans drawn up for general use or to improve future planning.

Reorganization of Floor Plan

To get the most out of their physical plant, workshop supervisors must learn how to develop new floor plans from time to time as they change their programs. Salmon and Salmon⁹ in their guide to architectural planning stress the need for flexibility and expandability in the planning of rehabilitation centers. Flexibility in the floor plans of a sheltered workshop is a continuing need.

When reorganizing the plans, decide exactly what is hoped to be gained by the change. One way of reaching a conclusion is by reviewing the operations and inquiring about what is wrong with the layout. Some questions might well be: Where are we failing in serving our clients? Can they move about the shop freely and safely? Does space as it is now arranged allow for training to the best advantage? Can materials be supplied to workers and finished work taken away without interrupting their work or that of others? Do the workers have to waste time getting to and from rest rooms or drink dispensers? How efficient are we in handling materials? Have we set up our jobs so that heavy materials are moved the shortest possible distance? Do the flow lines of our processes move smoothly, or are materials constantly being shifted back and forth? Does our present layout satisfy all legal and safety requirements?

The foregoing questions will not solve the whole problem. They are offered to indicate the type of analysis essential in achieving an adequate floor plan for the time being. When a shop has been reorganized to serve present purposes adequately, the job will not be done for all time; as the programs and purposes of the shop change, it will probably be found that floor plan changes are needed as well.

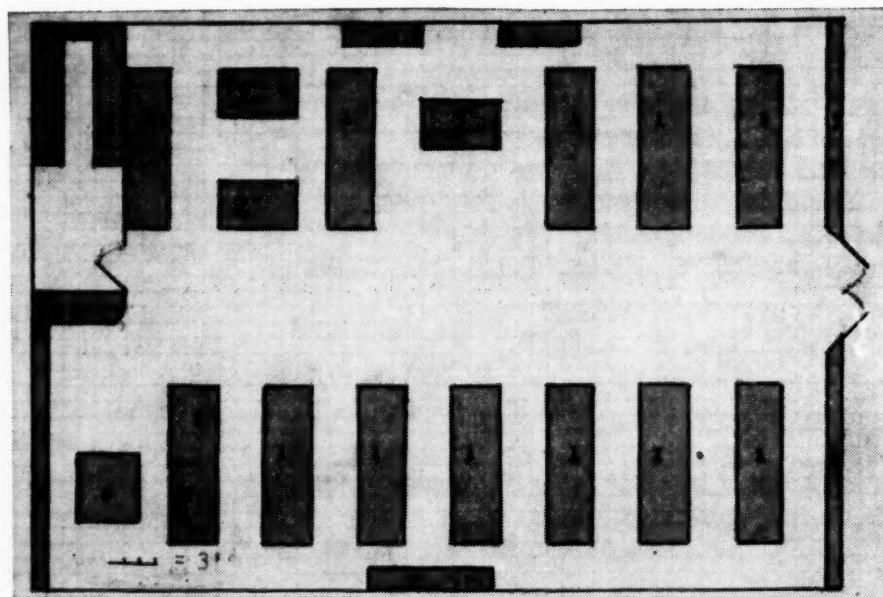
Workbenches and other shop equipment are heavy to move about, and the reorganization of the workshop will be hard work. This can be lightened considerably if one knows exactly where everything should go before anything is moved. A number of arrangements should be visualized and tested out with the shop's new objectives. A simple method for doing this is to draw the shop floor space to scale on graph paper. The equipment can also be drawn to scale and cut out of colored paper, using different colors to identify different items of equipment if desirable. By moving these materials about, as templates, it is easy to experiment with a variety of arrangements and analyze each in terms of desirable objectives. When an arrangement has been selected and the reorganization completed, the drawings may be saved for the next time the floor plan needs changing.

The functional improvements that can be achieved by an appropriate floor plan must be experienced to be appreciated fully. The following floor plans are offered as an indication of what can be done to solve space problems. The floor space used in all four plans is identical.

ARTICLE OF THE MONTH

Floor Plan 1.

This floor plan presents the layout of a sheltered shop as originally planned. The workbench arrangement might serve well enough for workers with no severe orthopedic limitations on some types of benchwork. If it were desirable to set up a production line operation, however, the layout would be found inadequate. If the shop is intended for the mentally retarded, it would not facilitate proper supervision, or, if it were meant for a shop population with 50 percent of the workers in wheel chairs, the capacity of the shop would be halved.

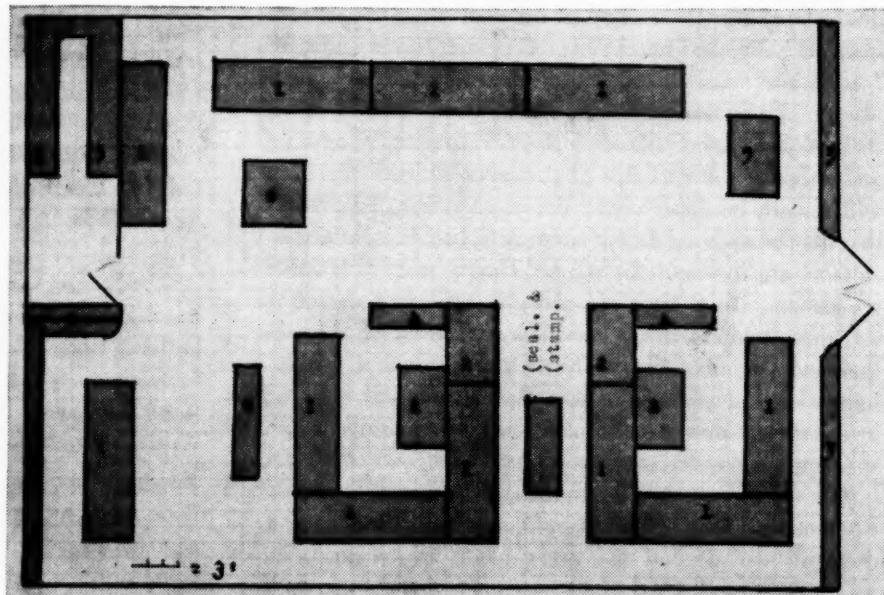


Floor Plan 2.

This arrangement of the same space and equipment as in *plan 1* provides an efficient production line on a lettershop operation. Fixed shelves hold supplies of insert materials within reach of collators and folders. Two small mobile sections of shelves hold supplies of envelopes within easy reach of workers who flap them. As materials are folded and envelopes flapped, they are passed to the next bench for inserting. Stuffed letters are picked up from both inserting benches by the worker on the sealing machine. The large open area beside the lettershop unit facilitates delivery of supplies and removal of finished work, both of which are bulky. Across the shop three workbenches placed end to end allow for setting up a short production line on a different type of work.

List of Equipment for Floor Plans 1 and 2:

1. 10' workbench	4. mobile shelves
2. 5' workbench	5. desk
3. fixed shelves	6. table
sealing and stamping machine (floor plan 2 only)	



The *first* illustration provides the floor plan of a traditional shop. The *second* plan is a rearrangement of this shop to facilitate a lettershop operation. Objectives for the changes are:

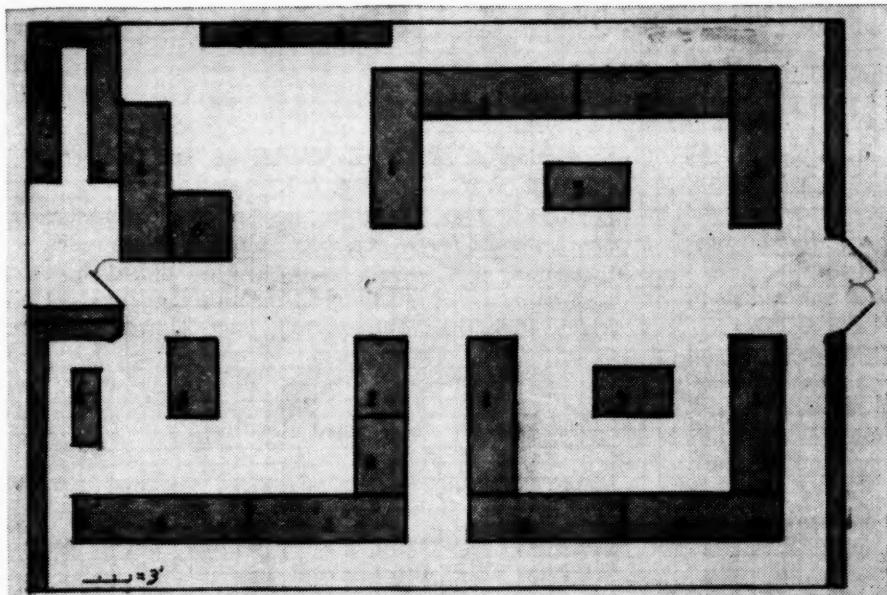
- 1) to decrease the materials handling by organizing the process flow so that workers can pass completed work directly to those doing the next operation,
- 2) to set up supply depots so workers can reach raw materials as needed,

3) to provide floor space for the stacking and moving of bulky lettershop supplies and completed work, and

4) to facilitate the setting up of an additional simple assembly production line.

The *third* plan represents a rearrangement to facilitate work with the mentally retarded. Objectives are:

- 1) to provide for ease in setting up simple production lines as needed,

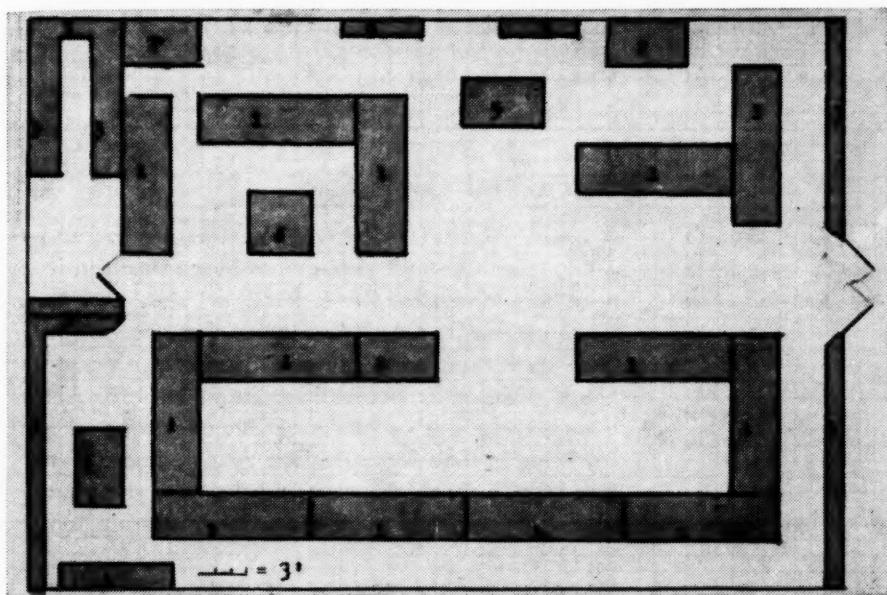


List of Equipment for Floor Plans 3 and 4:

1. 10' workbench	4. mobile shelves
2. 5' workbench	5. desk
3. fixed shelves	6. table

Floor Plan 3.

By exchanging two 5' workbenches used in *plan 1* for two supervisor's desks, this layout facilitates instruction and proper supervision of mentally retarded workers. The bench arrangement helps to focus supervisory attention on small groups of retardates, permits special subgroupings of trainees to encourage specific maturing influences, and facilitates the setting up of simple production lines. The plan allows for considerable floor storage in the work area itself, an advantage, as the usual run of work is bulky.

*Floor Plan 4.*

Even with two additional 10' workbenches this shop layout facilitates ease of access and adequate work space for 30 workers in wheel chairs in a shop population of over 60. Material handling is more direct than in *plan 1* and bench arrangement allows for the setting up of production lines.

- 2) to focus supervisory attention on small segments of the shop population,
- 3) to facilitate instruction and inspection, and
- 4) to provide additional floor space for materials handling and brief storage.

The *fourth* plan represents an arrangement to facilitate the use of a number of wheel-chairbound patients. This shop is in a comprehensive, residential care, rehabilitation facility, and patients must be able to move back and forth

between therapy sessions and work. The objectives for these changes are:

- 1) to allow wheel chair workers to leave and return to work stations without disturbing others,
- 2) to facilitate the setting up of simple production lines,
- 3) to facilitate giving out supplies and picking up completed work, and
- 4) to make work stations more accessible for instruction and inspection purposes.

ARTICLE OF THE MONTH

References

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2. Severson, Alfred L., Contract work in a sheltered shop. *Outlook for the Blind*. Sept., 1950. 44:7:200-201.
3. National Association of Sheltered Workshops and Homebound Programs, *A guide to comprehensive rehabilitation services to the homebound disabled (a textbook)*. (Monograph no. 4, April, 1961) Washington, D.C.: U.S. Dept. of Health, Education, and Welfare. 1961.
4. Townsend, M. Roberta, Industrial homework, p. 155-164, in: Chouinard, Edward L., and James F. Garrett (eds.), *Workshops for the disabled; a vocational rehabilitation source*. Washington, D.C.: U.S. Office of Vocational Rehabilitation. 1956. (Rehab. Serv. ser. no. 371)
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7. Lytle, Howard G., Ethics on pricing. *Bul.*, National Association of Sheltered Workshops and Homebound Programs. April, 1959. p. 6-7.
8. Dubrow, Max, Work procurement and job production. *Am. J. Mental Deficiency*. Sept., 1958. 63:2:355-359.
9. Salmon, F. Cuthbert, and Christine F. Salmon, *Rehabilitation center planning; an architectural guide*. University Park, Pa.: Pennsylvania State University Press. 1959.

Suggested Reading

Gotterer, Malcolm H., *Profitable small plant management*. Philadelphia: Chilton Co. 1954.

Ireson, William Grant, *Factory planning and plant layout*. New York: Prentice-Hall, Inc. 1952.

Lasser, J. K., *How to run a small business*. (2d ed.) New York: McGraw-Hill Book Co. 1955.

Morrow, Robert Lee, *Time study and motion economy, with procedures for method improvement*. New York: Ronald Press. 1946.

Muther, Richard, *Practical plant layout*. New York: McGraw-Hill Book Co. 1956.

Shubin, John A., and Huxley Madeheim, *Plant layout; developing and improving manufacturing plants*. New York: Prentice-Hall, Inc. 1951.

Have You Read? . . .

AT THIS TIME, while reading N. P. Smith's two-part article, you may wish to read again several articles in recent issues of *Rehabilitation Literature*. We suggest:

"Planning the Vocational Future of the Mentally Retarded; Current Trends in Community Programming," by William A. Fraenkel, Ph.D. April, 1961, p. 98-104.

"Industrial Recovery for Hemiplegics," by James A. Howard, Ph.D., Harold B. Warren, M.D., and Frank J. Kirkner, Ph.D. Feb., 1960, p. 58-60.

"Work and the Social Life of the Handicapped," by E. Louise Ware, Ph.D. Oct., 1959, p. 291-299.

"More Effective Rehabilitation Through Rehabilitation Center and State Vocational Rehabilitation Agency Cooperation," by Willis C. Gorthy and Nathan M. Slater. July, 1959, p. 195-200.

"Employability of the Multiple-Handicapped; Work Adjustment in the Sheltered Shop Under Counselor Supervision," by William Usdane, Ph.D. Jan., 1959, p. 3-9.

Have You Copies? . . .

MUCH USEFUL INFORMATION may be obtained from the publications of the Small Business Administration (811 Vermont Ave. N.W., Washington, D. C.). We suggest that you obtain from their main office or from their branch or regional offices their publications list SBA 115B. Although there will be others of interest to you, the following in their *Small Business Management Series* may include several you may wish to order from the U. S. Superintendent of Documents, Washington 25, D. C.:

- No. 4. *Improving Materials Handling in Small Plants*. 42 p. 20c.
- No. 9. *Cost Accounting for Small Manufacturers*. 89 p. 35c.
- No. 11. *Sales Training for the Smaller Manufacturer*. 40 p. 20c.
- No. 14. *The Foreman in Small Industry*. 28 p. 20c.
- No. 17. *New Product Introduction for Small Business Owners*. 69 p. 30c.
- No. 21. *Profitable Small Plant Layout*. 48 p. 25c.

Also available are yearbooks in the *Management Aids Series*, nos. 1-6 (various prices).

Review of the Month

Equipment for the Disabled

An Index of Aids and Ideas

For the Disabled

Compiled by

Margaret Agerholm, M.A., B.M., B.Ch.Oxon.

Elizabeth M. Hollings, M.A.O.T.

and

Wanda M. Williams, M.A.O.T.

Published by the National Fund for Research into Poliomyelitis and Other Crippling Diseases, Vincent House, Vincent Square, London, S.W.1, England. 6 pounds (\$21.60) in binder; 4 pounds, 10 shillings (\$16.20), unbound.

Reviewed by

Muriel E. Zimmerman, O.T.R., B.S.

BECAUSE OF THE GREAT ADVANCES in the past 10 years in the development of special devices for the disabled, this new British publication in four volumes, *Equipment for the Disabled*, issued by the National Fund for Research into Poliomyelitis and Other Crippling Diseases, is of timely interest.

The four volumes are an index rather than a discussion of such equipment. They are similar in style to the *Self-Help Devices for Rehabilitation* manuals, which were published by the Institute of Physical Medicine and Rehabilitation, New York University Medical Center, and to the single sheets issued by the Svenska Vanförevardens Centralkommitté of Sweden. Photographs of various items of equipment with some description are reproduced on single sheets of paper in loose-leaf style so that new items can be inserted into the binders and old items deleted.

Areas covered are: *Volume 1*—house adaptations, beds, chairs, wheelchairs, and hoists and lifting equipment; *Volume 2*—tables, overbed frames and workframes, communication, slings and equipment for flail arms, eating and drinking, and personal toilet; *Volume 3*—dressing and household; *Volume 4*—cooking, the disabled mother, hobbies, games and skills, walking, and transport.

The items depicted range from simple, homemade devices to more complex, commercially manufactured items. In many instances, very similar devices are shown with slight variations.

There is no attempt to analyze certain basic problems in the activities of daily living and then to standardize the approach to certain solutions. Nor have the compilers indicated when or for whom a certain item might or might not be appropriate. Had this been done, the book would be of greater value for persons inexperienced in the appropriate selection of self-help devices.

About the Compilers . . .

Margaret Agerholm is a lecturer, Nuffield Department of Orthopaedic Surgery, Oxford; Elizabeth Hollings is head occupational therapist and Wanda M. Williams is warden, Mary Marlborough Lodge, both with the Nuffield Orthopaedic Centre, Oxford.

About the Reviewer . . .

Miss Zimmerman is consultant in self-help devices and homemaking, Institute of Physical Medicine and Rehabilitation, New York City. She attended the Philadelphia School of Occupational Therapy and was certified by the American Occupational Therapy Association in 1939. In 1960 Miss Zimmerman obtained a B.S. degree from New York University. She has been a contributor to the literature on adapted rehabilitation equipment, writing a chapter in Willard and Spackman's *Principles of Occupational Therapy* (2d ed.), and has collaborated in the books *Living with a Disability* by Rusk and Taylor, *Rehabilitation Medicine* by Rusk and others, and *Arthritis: General Principles, Physical Medicine, Rehabilitation*, by Lowman.

BOOK REVIEWS

Some of the most original work is found in the wide variety of ideas shown for house adjustment and for the adaptation of home fixtures and appliances for different activities, such as opening doors, cleaning, and laundering. The ideas for hoists and lifting are also quite ingenious, although the over-all use and value of some might be questioned. The publication, for example, overlooks the fact that building law requirements and safety factors must be considered in the use of many items such as elevators. In New York and many other cities in the United States, an open area under an elevator is not permitted. Children or animals can be caught under the descending car without the knowledge of the occupant of the elevator, or "lift" in this book's parlance.

In general, the adaptations presented are exceedingly simple and practical and can be easily duplicated where commercial adaptations are not available. The publication should, therefore, be especially helpful in countries where production and manufacturing facilities are less developed or where labor costs are low. In the United States it would be extremely expensive to duplicate some of the chairs illustrated, particularly those requiring individual adaptations. These suggestions, however, would be quite practical in countries where talented and skilled craftsmen are available at low labor costs.

For physicians, therapists, and nurses concerned with providing self-help devices for their patients, this book is highly recommended as a supplement to other publications. Many items are familiar and will be well known to many readers, but there are sufficient additional suggestions to make the book worthwhile.

To this reviewer, who has devoted the last 10 years to the development and evaluation of self-help devices, it is gratifying that an organization such as the National Fund in Great Britain has produced such a publication in order to provide better services for those to whose welfare it is dedicated.

It is also interesting that this project provides another parallel example of activities of the National Fund in Great Britain and The National Foundation in the United States. The National Foundation has shortened its name by dropping "for Infantile Paralysis" but has broadened its program. The National Fund for Research into Poliomyelitis has extended both its program and its name by adding "and Other Crippling Diseases." For the past decade, The National Foundation has been the primary supporter of research in the development and evaluation of self-help devices. Now, the National Fund has also entered this important field.

Other Books Reviewed

586

Aging with a Future; A Selection of Papers Defining Goals and Responsibilities for the Current Decade; Reports and Guidelines from the White House Conference on Aging

Prepared by: Special Staff on Aging, U.S. Department of Health, Education, and Welfare

1961. 138 p. (Ser. no. 1) Paperbound. Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C. 45¢.

FIRST IN A SERIES of reports and guidelines from the White House Conference on Aging, held in January, 1961, the book contains 17 papers presented at 8 open meetings scheduled the first night of the Conference, each designed to deal with broad issues and implications of one major aspect of aging.

Contents: Responsibility for aging; seven principles, Arthur Larson.—Family life and older persons, Barry Goldwater.—The responsibilities of government, Robert B. Meyner.—The role of national voluntary organizations, Erwin D. Canham.—The older person, family life, and community health programs, Maurice E. Linden.—The older person and the family in the perspective of Jewish tradition, Abraham J. Heschel.—Highways to economic

security, George Meany.—Enhancing employment opportunities for older workers, Charles E. Odell.—The case for flexible retirement, Dwight S. Sargent.—New horizons in health and rehabilitation, Theodore G. Klumpp.—Spotlight on research, Ewald W. Busse.—Aging's challenge to rehabilitation, Mary E. Switzer.—The psychologic and physical benefits of work to the elderly, George E. Burch.—The future institution for the aged, Robert Morris.—The present and future of comprehensive care of the long-term patient at Baltimore City Hospitals, Mason F. Lord.—Society's concern for the aged who need protective services, Mary L. Hemmy.—A national foundation expresses its interest in the problems of older people, Thomas H. Carroll.

Papers by Dr. Klumpp, Dr. Busse, Miss Mary E. Switzer, and Dr. Burch will be of special interest to rehabilitation workers (p. 73-98).

The following titles in the *Reports and Guidelines* series were issued also in April, 1961, by the White House Conference: Series no. 2, *Education for aging*, 41 p., 25¢; no. 3, *Employment security and retirement of the older worker*, 55 p., 25¢; no. 4, *Impact of inflation on retired persons*, 39 p., 20¢; no. 5, *Income maintenance, including financing of health costs*, 98 p., 35¢; no. 6, *Free time activities: Recreation, voluntary services, citizenship participation*, 64 p., 30¢; no. 7, *Religion and aging*, 22 p., 15¢;

no. 8, *The role and training of professional personnel in the field of aging*, 58 p., 25¢.

587

Behavioral Approaches to Accident Research

By: **Association for the Aid of Crippled Children, New York City**

1961. 178 p. Paperbound. Association for the Aid of Crippled Children, 345 E. 46th St., New York 17, N.Y. \$1.50.

CONTAINING NINE PAPERS, discussions, summary, and review presented at a conference on research in accident prevention sponsored by the Association in 1960, the book represents viewpoints of prominent behavioral scientists. Accidents and their causes, studied for many years by engineers, insurance companies, physicians, and safety educators, have only recently been considered by sociologists, psychologists, and anthropologists as subjects for research. The book covers concept formation in accident research, contributions that behavioral scientists can make, and approaches to future research on childhood accidents. Section 2 includes four papers on sociodevelopmental considerations and cultural and sociological factors in childhood accidents, as well as biosocial approaches to research in this particular phase of accident prevention.

The Association is preparing, for publication in 1962, a book of readings in accident research, to contain significant research papers gathered from the literature.

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The Changing Pattern of Illness; Planning for the Chronically Ill in Niagara County; Survey Report of The Committee of One Hundred

By: **Council of Social Agencies, Niagara Falls, N.Y.**

1960. 165 p. figs., tabs. Paperbound. Spiral binding. A limited number of copies are available on request to the Council of Social Agencies, P.O. Box 406, Niagara Falls, N.Y.

THE CURRENT PUBLICATION contains the full survey text of a comprehensive 2-year study, by physicians, social agencies of Niagara County, and community volunteers, of facilities available for care of the chronically ill. Hospital, nursing home, and home care was investigated to determine gaps in service and needed co-ordination of services. A summary report of the Council, issued earlier in 1960, was listed in *Rehab. Lit.*, Sept., 1960, #647. The reports, the current one especially, would be useful in planning similar community surveys since they provide information on the original planning, organization of personnel, and methods.

589

The Conquest of Deafness; A History of the Long Struggle To Make Possible Normal Living to Those Handicapped by Lack of Normal Hearing

By: **Ruth E. Bender, Ph.D.**

1960. 208 p. illus., figs. The Press of Western Reserve University, 2040 Adelbert Rd., Cleveland 6, Ohio. \$6.00.

IN THIS ACCOUNT of society's attitudes toward deafness and the deaf, from the early history of mankind to the present, Miss Bender traces philosophical changes and initial attempts to train and educate deaf persons in the United States and Europe. The final chapter tells of 20th century accomplishments, modern methods of instruction, and hearing aid equipment now available. Adding to the book's usefulness are a bibliography of over 200 references, a chronology, and an index, mainly of persons influential in work for the deaf. Miss Bender, assistant clinical professor at Western Reserve University and supervisor of the Pre-School Hearing Program, Cleveland Hearing and Speech Center, is well known, having devoted her life to teaching and writing. She helped pioneer new binaural hearing-aid technics. This book resulted from several years' research in Europe and the United States.

590

A Handbook of Emotional Illness and Treatment; A Contemporary Guide, with Case Histories

By: **Richard C. Robertiello, M.D.**

1961. 159 p. Published by Argonaut Books, Inc., Larchmont, N.Y., and distributed by Citadel Press, 222 Park Ave. South, New York 3, N.Y. \$3.95.

THIS SMALL but comprehensive guide to all types of psychiatric disorders, their diagnosis, treatment, and prognosis is planned for the interested layman or professional. Section I gives descriptions of categories of mental illness, illustrated by 27 case histories. A considerable portion of the book contains a glossary of significant terms used in psychiatry (Section II). Additional features are a questionnaire for the reader who wishes to determine if he should seek psychiatric help, a section on forms of treatment—shock therapies, drugs, psychotherapy, psychosurgery, and adjunctive therapies, and, in conclusion, advice on choosing a therapist, on cost of services, and on professional qualifications and training of persons engaged in psychiatric work. Basic theories of psychoanalysis are summarized and schools of psychoanalysis compared. The author, in private practice, is also chief psychiatrist for the Long Island Consultation Center, the second largest community mental hygiene clinic in New York.

BOOK REVIEWS

591

Home Care

By: David Littauer, M.D., I. Jerome Flance, M.D., and Albert F. Wessen, Ph.D.

1961. 110 p. tabs. (*Hospital monograph ser. no. 9*) Paperbound. American Hospital Association, 840 N. Lake Shore Dr., Chicago 11, Ill. \$2.75.

ORGANIZATION AND OPERATION of a typical hospital-based home care program, as compared to home care services sponsored by other community agencies, are discussed in much detail, noting differences resulting from type of sponsorship. The home care program of the Jewish Hospital of St. Louis is analyzed to determine potentials and problems of the hospital-based program. Data gathered in 6 years' experience are included. Obstacles to the rapid growth of this community health resource are considered and conclusions offered on essentials of co-ordinated home care. A summary of the study appeared in the Jan. 16, 1961, issue of *Hospitals* (see *Rehab. Lit.*, Mar., 1961, #201).

592

Orthopädische Krankengymnastik; Lexikon und Kompendium

By: Martha Scharll

1961. 184 p. illus. (2d ed.) Paperbound. Published by Georg Thieme Verlag, Herdweg 63, Stuttgart N., Germany, and available in the U.S. and Canada from Intercontinental Medical Book Corp., New York 16, N.Y. \$3.35.

MISS SCHARLL, physical therapist at Orthopaedic University Polyclinic of Munich, Germany, in the first section of her book provides a dictionary of medical and orthopedic terms used in connection with therapeutic exercises. Part 2 discusses orthopedic conditions and diseases, with suggestions for physical therapy technics. Part 3 illustrates and explains practical application of therapeutic exercises. Miss Scharll has contributed articles to periodicals in the field of physical therapy and is the author of two brochures for parents, *Foot Exercises with Children* and *The Way to a Child's Good Posture*, both published by Georg Thieme of Stuttgart.

593

Principles and Technics of Rehabilitation Nursing

By: Florence Jones Terry, Gladys S. Benz, Dorothy Mereness, and Frank R. Kleffner

1961. 344 p. illus., figs., charts, tabs. (2d ed.) C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, Mo. \$6.00.

NURSING PERSONNEL and teachers in nursing schools should be aware of this textbook covering basic principles and technics appropriate in the care and rehabilitation of persons with a wide variety of disabilities. New information has been added in the second edition and a new chapter on "The home of the handicapped person" included. As is natural in a book attempting to cover so much, some chapters are brief. For the student whose interest is aroused and who wishes to explore certain phases of rehabilitation, the teacher might wish to point out other sources of bibliographic reference, since few additions have been made to bibliographies following each chapter. In a field where rapid advances have been made and reported in recent years, up-to-date bibliographies enhance any revision of a textbook. Set up in units for ease in teaching, the book should provide background on the meaning and place of rehabilitation in society and community resources available. Technics specifically useful in rehabilitation of the aged, the handicapped child, the mentally ill, and those with special types of disease are discussed in particular detail. The chapter on speech therapy is by Frank R. Kleffner, Ph.D. The appendix should be used with caution; addresses of agencies concerned with rehabilitation are often outdated.

594

Visual Communication for the Hard of Hearing; History, Research, Methods

By: John J. O'Neill and Herbert J. Oyer

1961. 163 p. illus., figs. Prentice-Hall, Inc., Englewood Cliffs, N.J. \$5.75.

LACK OF A SOURCE providing an up-to-date review of lipreading methods or suggesting procedures for teaching lipreading led to the organization, in this textbook, of previously widely scattered materials. The authors, directors of speech and hearing clinics at the University of Illinois and Michigan State University, respectively, planned the book as a basic reference source for a course on aural rehabilitation, speech reading, or lipreading. It also provides useful information for students of psychology, special education, and otology. The first chapter gives introductory data on lipreading, the basic approach, teacher qualifications, materials to be used, and orientation of the lipreader. A historical review of the development of lipreading in Europe and America is presented. Also reviewed are lipreading tests and experimental research on intelligence, personality, and visual skills of lipreaders. Practical aids for the instructor are the suggested approach to visual training and to co-ordination of auditory training with lipreading instruction; methods and materials for use with children and adults; and procedures for individual lesson planning. Advice to parents on the possible

(Continued on page 247)

Digests of the Month

Journal articles, chapters of books, research reports, and other current publications have been selected for digest in this section because of their significance and possible interest to readers in the various professional disciplines. Authors' and publishers' addresses are given when available for the convenience of the reader should he desire to obtain the complete article or publication. The editor will be most receptive to suggestions as to new publications warranting this special attention in Digests of the Month.

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Who Are the Home Teachers? (Chapter 5)

In: *Home Teachers of the Adult Blind; What They Do, What They Could Do; What Will Enable Them To Do It*, by Elizabeth Cosgrove, Ch. 5, p. 26-33.

1961. 119 p. tabs. American Association of Workers for the Blind, Washington 5, D.C.

OF 110 AGENCIES in various parts of the country visited or written to during the study on home teachers of the blind, 67 agencies reported a total budgeting for 326 home teacher positions under 30 titles during the current fiscal year. Two part-time positions and 11 vacancies were included.

The study staff interviewed 50 teachers (12 were men), all but 4 employed in public agencies. By age, 8 were in the 20's, 15 the 30's, 11 the 40's, 10 the 50's, and 5 the 60's, while 1 was over 70. Seven were separated or widowed, 21 were married, and 22 not. Three were sighted, 15 were partially sighted but legally blind, and 32 had no useful sight.

The 47 who were blind could all use public transportation, although several said a friend or guide usually went along. Most use guide-driver service in rural areas; two required to use public transportation in such areas found much time lost because of bus and train schedules. Fifteen reported full-time guide-driver service, two of whom did not want it, as the guides interfered in interviews.

Many use canes of different lengths with varying skills. Some partially sighted can move about alone in homes and offices. Three use guide dogs occasionally in their work and always in their personal travels. The extent of mobility of these home teachers is difficult to ascertain accurately.

Of the 50 teachers 10 had been in the present position under 5 years, 17 from 5 to 10 years, 16 from 10 to 20 years, 5 from 20 to 30 years, and 2 for more than 30. Thirty-six had "home teacher" in their titles, the others some combination of "counselor," "social" or "case worker," or "teacher." Twenty-nine had been certified. Thirty-four had Bachelor's or Master's degrees, 6 had less than 4 years of college, 2 were registered nurses, and 8 had less than 4 years of high school. Three of the five Master's degrees were from schools of guidance or counseling, one from an accredited school of social work, and one from a school of music. Eight other persons had one year or

more of graduate study and 4 less than one year; this study was in counseling, social work, psychology, and sociology. Bachelor's degrees in the main were in education, psychology, or sociology but also in home economics, political science, and occupational therapy.

The above does not give a true picture of the educational achievement of those who attended schools for the blind, including Overbrook School for the Blind, where several categories for admission are based on the background and educational plans of the student. Twelve of the 50 home teachers had attended Overbrook for varying periods, and 10 others several schools with no evaluation of their achievement in elementary and secondary school. Several teachers unable to attend college have taken courses whenever available.

Of the 42 who went beyond high school, only 17 had supervised field work, the nature of which and quality of supervision could not be ascertained. Four with full-time graduate study in schools of social work had a year's supervised field work under a public welfare agency, but the social case work process was not stressed and field work consisted of determination of eligibility for assistance. All others of the 17 but 2 had field work supervised by agencies for the blind.

Forty teachers had had 1 to 30 years' paid experience prior to the present job. Two who had more than 25 years of experience had been home teachers for other agencies. At least 30 kinds of experience were reported but only 7 had experience of value in preparing for being a home teacher if preceded by training and constructive supervision. The 7 had worked in rehabilitation counseling, social case work, nursing, teaching in elementary schools, camp counseling, and braille tutoring.

Several had worked in agencies for the blind, doing nonprofessional work. In at least one case such experience had been counted as "work with the blind" to qualify for the present work. Other occupations were widely ranging "pot-boiling jobs" while attending school or between jobs. This might reflect the enterprising quality of so many of the teachers.

Although the study was directed toward finding facts, most of those interviewed were eager to volunteer opinions. The information gained was slightly better than impressionistic and may be of worth in recruitment and training.

The majority of the sample were referred to their

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present work by a school or rehabilitation counselor and took this "forced choice" out of inability to find other work because of blindness and lack of specific training. Around a dozen were inspired and guided by teachers or their experiences as blind persons with a home teacher. A few chose the work because they had in various ways been impressed with lack of services for the adult blind and wished to help, and some were recruited directly by supervisors or heads. Only a few chose home teaching. One who did rejected a better paying position with sighted clients.

Most teachers believed their training inadequate. Many have learned through their own efforts and believe they are now competent. Many, including degree-holders, feel they must ever improve their preparation because of the special problems their clients face. They wished for better equipment, covering the gamut of the social sciences, social case work and counseling with supervised field work, travel-training instruction, and better instruction in disease of the eye and in crafts. One at a loss in dealing with psychosocial problems wanted to be better instructed in machine sewing. She stated you did not need a college degree to teach an older person how to knit. Another with a Master's degree felt she was over-trained, with few opportunities to use her skills.

A few were satisfied with the status quo but many wanted changes in major areas. They wanted smaller case loads, so they could move more to independence. They wanted freedom from clerical work, gathering talking books for repair, distributing craft material, and seeking market outlets for craft products. They wanted the same recognition given other agency staff. One commented, "We do all the rehabilitation and the counselors get the credit and the money." Many wanted more time with supervisors and wished them to go along on calls sometimes.

They wanted access to agency heads or even just an occasional staff meeting with them. Also desired were more client facilities such as travel-training instruction. Frustration occurred because clients were beyond the age or degree of health for vocational rehabilitation and few facilities were open to them. Some working out of their homes wanted office space at the agency, believing the rest of the agency would be better informed and they would not be left out of consideration.

Suggestions were for improving the teachers' service and not their lot: The home teachers are client-centered, not self-centered.

Most clients were over 50 years of age, although a few teachers reported some children. Most clients had an additional handicap. Several teachers had a few hard of hearing-blind and deaf-blind clients. Most reported that only one tenth to a fifth of the clients had been blinded in recent years. Far more clients lived with relatives than were alone or in institutions. Generally they were in the lower and marginal income groups. In some cases a formal

analysis was made of clients' characteristics, but most teachers objected to this as they regarded clients as individuals with different needs and interests regardless of age, ethnic background, or physical or mental limitations.

Interviewers found that a more generous, hard-working group of ambitious people would be hard to find. Frequently, under severe administrative limitations, they try to improve their skills in helping clients. Enterprising and industrious, they know what they want—the comfort and development of their clients. They also want to have their wants listened to.

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Epilepsy and Car-Driving

By: J. C. Phemister, M.B. Edin., M.R.C.P.E. (*Senior Registrar, Maida Vale Hospital for Nervous Diseases, London, W.9, Eng.*)

In: *Lancet*. June 10, 1961. 7189:1276-1277.

A N INQUIRY was made at a neurological outpatient clinic over 3 months as to whether epileptic patients drove or had valid driving licences and about their feelings on their driving. Those with attacks of recent onset were not questioned. As patients were assured the object was not to catch them breaking the law, answers probably were correct.

The 70 women and 60 men questioned (including mentally defective and demented and those with hemiparesis or other defect) all had recurrent attacks.

Only one woman drives. She obtained a valid licence by filling out the application form untruthfully (box 12, "Do you suffer from epilepsy, or from sudden attacks of disabling giddiness or fainting?"). Eight women had let driving licences lapse, probably because of their disease, although at least 3 had had attacks before getting one. None admitted having had a driving accident.

Of the 60 men, 27 drive or have valid licences. None admitted any accident traceable to epilepsy, although several had had attacks while driving. None had ever had a serious accident in which someone was injured.

Three of the men do not drive but own cars and renew licences by being untruthful. They retain the licences out of fear of a retest if the licences lapse. They hope to be attack-free and able to drive safely. One has suspended his car insurance until he is "rid of the attacks."

Two men who drive first had attacks after taking out the new 3-year licences and are uncertain what they will do when renewal time comes. One other man renews his licence in Eire and continues to drive here.

One man filled in the licence application form truthfully, requested special medical examination, and was treated courteously by the local taxation officer. Stating that he had nocturnal seizures only (he also had diurnal), he was issued a licence. Two other patients said they

always answered "yes" for question 12 when applying and their licences were renewed without question. Two drive without licences. They are afraid to be untruthful on the application, preferring to risk a small fine for driving with no licence.

Sixteen fill out licences untruthfully; several defensively say they do not "suffer" from epilepsy and stand on the literal wording of question 12. Three with only minor attacks said neither the doctor nor hospital had ever *told* them they had epilepsy.

Of the 33 men not driving or holding licences, 3 surrendered their licences voluntarily when the doctor advised them not to drive, 5 had let licences lapse, 2 had had military but never civilian licences, one was refused a licence after filling in the form truthfully, although he had had no attacks for 3 years, and 22 had never driven nor had licences.

Almost all those continuing to drive said they never had an attack while driving or they had enough warning. One said he once pulled over to the kerb, got out of the car, handed his keys to a police constable, telling him he was going to faint, and lay down on the sidewalk. He awakened in a hospital casualty department with the policeman, who stated he hadn't really believed him. The policeman escorted him back to his car and watched him drive off.

All said they would give up driving in event of an unheralded attack while driving or on causing an accident. Many sincerely believed there was no risk to anyone. Some, troubled by guilt, were on the defensive. A few were bitter about this further social and legal imposition: Two said it would be "just as well" if they met death. Most felt the restriction too unfair to be tolerated and that they were justified in driving, risk or not. Some men stated that on stopping driving they would lose their jobs and their families would suffer.

This small sample probably represents the well-con-

(Continued from page 244)

value of TV in lipreading instruction are included. Appendixes contain descriptions of two visual hearing tests, visual instructional films, and practice activities for lessons.

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Your Child's Speech Problems

By: Charles Van Riper

1961. 139 p. Harper & Bros., 49 E. 33rd St., New York 16, N.Y. \$3.00.

NOT ONLY WILL PARENTS profit from reading Dr. Van Riper's latest book explaining the nature and causes of speech problems in children; they will enjoy it in the process. Written in easy conversational style, his

trolled and moderately controlled epileptic population. That nearly half drove or had licences is striking. Probably two-thirds of the men capable of it drove, if the inadequate, the unemployable, and the younger patients still looked after at home are allowed for. If these men are to be believed, none had an important accident while driving, a remarkable finding in a comparable group of "normal" drivers.

Of practical importance is their intention to keep on driving. Ought steps be taken to see they do not? It seems only common sense that driving should be forbidden a man with periods of altered consciousness, but such prohibition may fall unfairly because of the notoriety of the epileptic's disease. The man with precarious coronary circulation may be a dangerous driver, yet a licence is still allowed him after a frank infarction.

Reliable data on incidence of epileptic attacks as a cause of traffic accidents is not likely to be forthcoming. A healthy man is willing to attribute failure to a momentary "blackout," but the epileptic will hide a lapse of consciousness that may reveal his illegally obtained licence, resulting in insurance difficulties.

All the doctor can do is advise his patient not to drive and try to bring influence from the family. The local authority can revoke a licence when he believes a driver is dangerous because of disease or disability, but in practice there would have to be an accident first.

Many epileptics will continue to drive; a practical way to stop them is the abhorrent one of requiring notification of the authorities, as in some parts of the United States. This small study indicates there is no more danger from epileptics than from other persons. The observations give no cause for worry.

The Lancet is published weekly at 7, Adam St., Adelphi, London, W.C.2, England; subscription rates (including postage): 1 year, £3 3s.; 6 months, £1 11s. 6d.; 3 months, 15s. 9d.

counseling on ways parents can and have helped children acquire normal speech should bring reassurance to anxious mothers and fathers. He discusses the home treatment of children with cleft palate speech, defective consonant sounds and voice disorders, and those who stutter. Common mistakes parents often make in dealing with such children in the home are noted, with suggestions for correcting them. Parents can also aid the professional speech therapist in his work with their children, as Dr. Van Riper shows. Therapists will find his counseling methods interesting and will want to be aware of the book as a resource for parents. The author, well known in his field for many years, has been director of the Speech and Hearing Clinic, Western Michigan University, Kalamazoo, since 1936.

Abstracts of Current Literature

This abstracting section, together with other numbered references indexed in this issue, serves as a supplement to the reference book Rehabilitation Literature 1950-1955, compiled by Graham and Mullen and published in 1956 by the Blakiston Division of McGraw-Hill Book Company, New York. An author index will be found on the last page of the issue.

ACCIDENTS

See 587.

AMPUTATION

598. Bugel, H. J. (VA Hosp., Nashville, Tenn.)

A study of lower extremity amputees, by H. J. Bugel and R. I. Carlson. *Am. J. Phys. Med.* June, 1961. 40:3: 93-95.

An analysis of surgical procedures, end results, and the prescription and use of prostheses in 257 lower extremity amputations performed on 222 patients between April, 1947, and January, 1960, at the Nashville (Tenn.) VA Hospital. The statistics cover data mainly on 128 patients having 155 amputations from 1954 through 1959. Prior to 1954, 71% of such patients received prostheses; after 1954 the figure dropped to 26%. The severity of vascular disease appeared to be the most significant factor in prescribing a prosthesis; it is not recommended in instances when it is thought that a prosthesis would cause a second amputation, life would be shortened, or the additional efforts of its use would be a burden in daily living.

AMPUTATION—MEDICAL TREATMENT

599. Schlitt, Robert J. (VA Hosp., University and Woodland Aves., Philadelphia 4, Pa.)

Lower extremity amputations in peripheral vascular disease, by Robert J. Schlitt and Oscar Serlin. *Am. J. Surg.* Nov., 1960. 100:5:682-689.

Experiences with 129 consecutive amputations of the lower extremities in 96 patients and findings of complete follow-up study in 87 are reviewed. Amputations were performed at the Philadelphia VA Hospital from February, 1953, to June, 1958. Conservative types of amputation to preserve length in the extremity and the success achieved in fitting elderly amputees with a prosthesis are discussed. It is believed that patients who have had unilateral amputation of the lower extremity due to onset of gangrene in peripheral vascular disease and who are not yet over 70 years of age can be successfully fitted with a prosthesis and instructed in its use. Definite and serious physical disability appears to be the only barrier to use of a prosthesis in these patients. A brief review of the literature concerning attempts to conserve length of the lower extremity in amputation is included.

APHASIA—PERSONNEL

600. Fink, Stephen L. (Highland View Hosp., Harvard Rd., Cleveland 22, Ohio)

The clinical psychologist evaluates aphasia rehabilitation. *Asha.* June, 1961. 3:6:177-179.

Personal contact, often crucial to a patient's progress,

may be diluted by team methods. Success of treatment in aphasia may depend heavily upon a close working relationship between the speech pathologist and the patient. The pathologist must have the freedom to determine the nature and extent of therapy and should not feel totally dependent on some one "higher up in the team" for making decisions.

ARTHRITIS

601. Rabideau, Raymond (415 Seventh St., S., Virginia, Minn.)

Contemporary management of arthritis. *Phys. Therapy Rev.* June, 1961. 41:6:436-439.

In spite of new discoveries and advances in treatment, preventing or minimizing deformity and the maintenance or improvement of function are still the most important phase of management. The patient needs adequate instruction in a consistent and logical home physical therapy regimen. The physician's and therapist's attitudes and sympathetic understanding are important to the patient's morale, especially in cases where minimal improvement is the final result. Industry, too, has a responsibility in maintaining the health of workers through preventive measures.

ARTHRITIS—MEDICAL TREATMENT

602. Rothman, Leon M. (Jewish Chronic Disease Hosp., E. 49th St. & Rutland Rd., Brooklyn 3, N.Y.)

Current concepts in the physical management of arthritis, by Leon M. Rothman and Joseph B. Rogoff. *N.Y. State J. Med.* Feb. 1, 1961. 61:3:396-401.

Six objectives of therapy are discussed, indicating how a therapeutic regimen can be planned to achieve objective goals. Emphasis is placed on total rehabilitation, including the psychological and social factors. Collaboration of the practicing physician and specialists in rheumatic disease and physical medicine can insure maximum benefits to the patient. From the start of treatment everything possible should be done to counteract flexion and prevent deformity. Modalities of physical medicine used in treating various forms of rheumatoid arthritis are discussed in relation to their therapeutic value.

ASTHMA

603. Scherr, Merle S. (Allergy Clinic, Charleston Mem. Hosp., Charleston, W. Va.)

Practical rehabilitation of the asthmatic patient. *South. Med. J.* Oct., 1960. 53:1287-1290.

Organized programs for the rehabilitation of asthmatic patients currently operating in the U.S., their facilities, and sponsors are reviewed briefly. The types of specialists and facilities needed for such programs are not always available, however, in smaller communities. Dr. Scherr

ABSTRACTS

advocates an outpatient program that will enable the teaching of respiratory and physical exercises on a group therapy basis; the program can be done locally and made available to all asthmatic patients through use of YMCA facilities and under the direction of the physical fitness director. A trained allergist supervises. Organization of the physical rehabilitation program is discussed. Dr. Scherr described the Charleston Asthma Conditioning Program for children in a 1958 article (*Rehab. Lit.*, Feb., 1959, #153).

AUDIOMETRIC TESTS

See 637.

BACKACHE

604. Becker, William F. (*Western Electric Co., Hawthorne Works, Chicago 23, Ill.*)

Prevention of low back disability. *J. Occupational Med.* July, 1961. 3:7:329-335.

In an attempt to reduce the rising trend in frequency, severity, and costs of industrial back cases and to maintain the health of employees, Western Electric Company instituted, 10 years ago, a selective placement program for male applicants and transferees assigned to heavy jobs. Essentials of a disability prevention program are outlined, indicating responsibilities of operating management personnel and the medical department. Procedures of the special examination and the clinical data sought are discussed. Clinical methods of management of back cases and experiences with the program are also given.

605. Kottke, Frederic J. (*Dept. of Phys. Med. and Rehab., Univ. of Minnesota, Minneapolis 14, Minn.*)

Evaluation and treatment of low back pain due to mechanical causes. *Arch. Phys. Med. and Rehab.* June, 1961. 42:6:426-440.

A discussion limited to pain arising from damage to structures in the back. Injury to the low back may be due to sudden extreme force exceeding the compressive strength of bone or the tensile strength of ligaments and connective tissue, or to prolonged stress that stretches ligaments and connective tissues. In evaluating injury, the site should be localized as definitely as possible by physical examination, functional tests, and roentgenologic studies. Electromyography is useful in establishing involvement of motor nerve roots. Therapy should include support and rest, relief of pain, anti-inflammatory measures, restoration of normal mobility, and re-establishment of normal strength. A detailed explanation of the effects of damage or stress to low back structures, evaluation procedures, and treatment methods is given.

BLIND—PROGRAMS

606. Cosgrove, Elizabeth

Home teachers of the adult blind; what they do, what they could do; what will enable them to do it. Washington, D.C., Am. Assn. of Workers for the Blind, 1961. 119 p. tabs.

This detailed study covers the general concepts relating to the blind and to agency administration, methods of the study, data on 50 home teachers interviewed by the Study staff, analysis of their activities and the administrative settings within which they work, the use of profes-

sional and community resources by teachers, and conclusions from the findings. Practical recommendations on defining the function of home teachers, their needed qualifications and training, have been carefully formulated. The appendixes contain additional information of value to administrators. (For a digest of Chapter V "Who Are the Home Teachers?" see this issue of *Rehab. Lit.*, #596.)

Available from American Association of Workers for the Blind, 1511 K St., N.W., Washington 5, D.C. The Association also has a limited number of braille copies available.

BLIND—PSYCHOLOGICAL TESTS

607. Zarlock, Stanley P. (*VA Hosp., Lexington, Ky.*)

Magical thinking and associated psychological reactions to blindness. *J. Consulting Psych.* Apr., 1961. 25:2: 155-159.

In this condensation of a doctoral dissertation (*Univ. of Buffalo*), the author reports findings of an investigation of the relation between psychological characteristics in 52 blind male subjects and their social adaptation. High ego strength, low manifest anxiety, and a positive attitude toward blindness were found to be related to good social adaptation to the condition. Those who scored below the mean on the Social Adjustment Scale were frequently rated from their interviews as persons who rejected their blindness and believed in miraculous cures. Comparison of 25 blind persons who scored highest on the Scale with 25 physically normal persons revealed no significant differences between blind and sighted considered socially well adjusted.

BRAIN INJURIES—PSYCHOLOGICAL TESTS

608. Stein, Kenneth B. (*VA Mental Hygiene Clinic, 49 Fourth St., San Francisco 3, Calif.*)

The effect of brain damage upon speed, accuracy, and improvement in visual motor functioning. *J. Consulting Psych.* Apr., 1961. 25:2:171-177.

Speed, accuracy, and improvement in visual motor functioning were assessed in 60 persons with cortical brain damage and 120 control subjects matched for age, education, and IQ. Results obtained from a 3-minute substitution task indicated all 3 aspects were impaired in the brain-injured group. Relatively low intercorrelations of the variables suggest they may be fairly independent and specific factors contributing to the more general visual motor function or process. Age appeared to be less independent, since it correlated significantly with speed, accuracy, and improvement. IQ showed no noticeable influence upon visual motor performance.

BURNS—PHYSICAL THERAPY

609. Roodhouse, James W. (*2215 W. Barker Ave., Peoria, Ill.*)

Physical therapy for burn injuries. *Phys. Therapy Rev.* June, 1961. 41:6:432-435.

In this paper presented at the 1960 annual conference of the American Physical Therapy Association, the author discusses causes, types, and early treatment of burns, as well as adaptations in treatment for burns of different causes and degrees of severity. In the early stages of treatment, physical therapy is mainly preventive—hydro-

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therapy to hasten the healing process (for burns in small areas) and functional positioning and joint mobilization. In the pregrafting period and after grafting, hydrotherapy, ultraviolet to promote faster healing, massage, and joint mobilization are of value. Judicious use of physical therapy will help reduce the hospital stay and the period of patient inactivity.

CEREBRAL PALSY

See 615; 625.

CEREBRAL PALSY—CALIFORNIA

610. Bleck, E. E. (23 Baldwin Ave., San Mateo, Calif.)

Treatment and parent counseling for the preschool child with cerebral palsy, by E. E. Bleck and Lee Headley. *Pediatrics*. June, 1961. 27:6:1026-1032.

Four years' experience with the parent-participation Cerebral Palsy Preschool Nursery in San Mateo, Calif., shows that such a facility serves several important functions. It provides an excellent means of helping parents at the time they most need help; parents are able to accept and use medical advice more effectively. The school benefits the child by offering a full range of therapeutic treatment by professional personnel. The community also benefits financially since the severely involved, uneducable child is not admitted to the public school for cerebral palsied on a "trial" basis. Personnel needed in such a nursery school to insure maximum success in treatment are discussed.

CEREBRAL PALSY—BIOGRAPHY

611. Spastics' Quart. June, 1961. 10:2.

Contents: As I see it, Valerie Lang.—Beat—or not? Anthony H. Sutton.—One of many, Jacqueline E. Dickinson.—Jumping the milestones, Keith Griffen.—Born too soon, Peter H. Reynolds.—The spastic's own view.

Five young adult cerebral palsied persons submitted personal accounts of their handicaps and the effects on their day-to-day life, their attitude to their environment, and the adjustments they have had to make. Language difficulties were noted as the greatest handicap by all; in speaking of their schooling, they expressed great preoccupation with treatment for physical disabilities and with occupational aspects. Although all had achieved a measure of successful adjustment, there are still rather unrealistic views of their own capabilities. The final article reviews the 5 accounts and explains the factors responsible for the attitudes expressed. The question of segregation for the cerebral palsied is considered and the implications for special education are noted.

CEREBRAL PALSY—EQUIPMENT

See 660.

CEREBRAL PALSY—OCCUPATIONAL THERAPY

612. Mysak, Edward D. (Newington Hosp. for Crippled Children, Newington, Conn.)

Neurophysiological considerations in occupational therapy for the cerebral palsied, by Edward D. Mysak and Mary R. Fiorentino. *Am. J. Occupational Ther.* May-June, 1961. 15:3:112-117.

The application of basic principles of the Bobath approach to occupational therapy in the treatment of cerebral palsied children is explained. Emphasis should be on therapy technics such as reflex-inhibiting postures, desensitization, dissociation, and facilitation rather than on direct teaching of motor tasks, which, if done without regard for neurophysiological readiness, may actually impede rather than facilitate the development of normal children. Dr. Mysak's outline of basic Bobath principles and their application to speech therapy and language development appeared in an article listed in *Rehab. Lit.*, Oct., 1959, #779.

CEREBRAL PALSY—SPEECH CORRECTION

613. Irwin, Orvis C.

A manual of articulation testing for use with children with cerebral palsy. *Cerebral Palsy Rev.* May-June, 1961. 22:3:1-24.

Dr. Irwin, psychologist and research professor of logopedics at the Institute of Logopedics, Wichita, Kan., offers, in this manual, the results of 5 years' experimentation and its validation. The integrated test, composed of 4 short consonant tests and a vowel test, is for use in the objective testing of the speech of the cerebral palsied. The manual gives a complete discussion of the 5 test parts, articulation test forms and individual record sheets for tabulating results, and an 8-page section demonstrating administration and interpretation of one test form. In a nationwide sampling, 1,555 children with cerebral palsy were examined in 80 speech centers in 40 states in the process of standardizing and validating the reliability of the integrated test. Dr. Martin Palmer, director of the Institute, notes that this is the first such instrument designed particularly for the cerebral palsied and, as such, should be of interest to personnel in clinical work.

This issue, devoted entirely to Dr. Irwin's manual, is available from *Cerebral Palsy Review*, Institute of Logopedics, Wichita 19, Kan., at \$1.50 a copy.

CHILD WELFARE—RESEARCH

614. U.S. Children's Bureau

Research relating to children . . . studies in progress . . . August, 1960-January, 1961, by the Clearinghouse for Research in Child Life, Washington, D.C., Govt. Print. Off., 1961. 124 p. (Bul. no. 13)

Studies reported in earlier bulletins (3-12) that are still in progress are not included; only those first reported during the period covered (August, 1960-January 31, 1961) appear in this issue. Sections on special education and exceptional children (p. 52-79) contain references to studies on the retarded, physically handicapped, the gifted, and the maladjusted and emotionally disturbed.

Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 75¢ a copy.

CHILDREN—GROWTH AND DEVELOPMENT

615. Tobis, Jerome S. (Dept. of Phys. Med. and Rehab., Montefiore Hosp., 210th St. and Bainbridge Ave., New York 67, N.Y.)

Study of growth patterns in cerebral palsy, by Jerome

ABSTRACTS

S. Tobis (and others). *Arch. Phys. Med. and Rehab.* June, 1961. 42:6:475-481.

Results of this study substantiate earlier impressions that chronic central nervous system disability has a definitely adverse effect on growth. Heights and weights of 86 cerebral palsied children were found to be significantly below the norms used and significantly lower than 86 non-handicapped children from the same geographic area, matched for age, sex, and ethnic origin. Severity of physical involvement in the cerebral palsied correlated with degree of impairment in growth. Severe deviation in stature was associated with dependency in feeding and ambulation but showed no relationship to IQ. Prematurity, *per se*, was not related to height or weight in this group. Factors affecting growth in the cerebral palsied are discussed.

See also 635; 655.

CHILDREN (DEPENDENT)

616. Schweikert, Harry A., Jr.

Adoption by the disabled. *Paraplegia News.* June, 1961. 15:154:6.

In spite of the view expressed by the U.S. Children's Bureau and the International Social Service, that physical disability of adoptive applicants should be of no significance in itself, paraplegics still encounter difficulties in adopting children. Mr. Schweikert, Jr., has cited sources to which the disabled might apply, stressing the need for dealing with authorized agencies. State departments of welfare and the U.S. Children's Bureau will supply information on adoptions. A U.S. Armed Forces *Manual on Inter-Country Adoptions* is available from the U.S. Superintendent of Documents, Washington 25, D.C. (10¢); additional information can be had from International Social Service, 345 E. 46th St., New York 17, N.Y.

CHRONIC DISEASE—INSTITUTIONS

617. Morris, Robert (Brandeis Univ., Waltham, Mass.)

How hospitals and nursing homes can work together. *Hospitals.* June 1, 1961. 35:11:32-36, 104.

Co-operation or integration of services between 10 non-profit institutions for long-term care and 8 general hospitals was analyzed to determine the feasibility of this approach to long-term care. It was found that professional services can be integrated without merger and loss of autonomy. Successful integration of nursing and rehabilitation services also suggests integration could be extended. Services of the nursing home can be upgraded. So far, direct benefits to hospitals have been minimal but are anticipated in teaching, research, and more rapid discharge of the chronically ill. This study was part of a series of studies on co-ordination of services for care of the chronically ill (see reference to Franz Goldmann's report, *Rehab. Lit.*, Feb., 1961, #142).

618. U.S. Public Health Service

Nursing home standards guide; recommendations relating to standards for establishing, maintaining, and operating nursing homes. Washington, D.C., Govt. Print. Off., 1961. 63 p. (Public Health Serv. publ. no. 827)

Issued as a guide for licensure and regulatory agencies, these recommended standards should be an aid in agencies' efforts to improve laws, regulations, and ordinances relating to nursing homes. Representing a synthesis of the better state laws and regulations already in existence, the standards would need to be modified to meet local conditions. Chapters cover definition of nursing homes, the development and function of standards, legal aspects of licensure and enforcement, varied service for patient care, administrative management, maintenance, and operation of the services and facility, the physical plant, and safety measures. Appendixes contain names and addresses of other national standard or code-setting bodies, as well as examples of required minimum staffing standards.

Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 45¢ a copy.

CHRONIC DISEASE—SURVEYS—NEW YORK

See 588.

CLEFT PALATE—NEW YORK

619. Lending, Miriam (New York City Dept. of Health, Bur. for Handicapped Children, 93 Worth St., Rm. 700, New York 13, N.Y.)

A follow-up study of children born with a cleft lip and/or cleft palate, by Miriam Lending (and others). *N.Y. State J. Med.* Feb. 15, 1961. 61:4:562-568.

From data obtained in a questionnaire follow-up study of 76 of the 123 infants born with cleft lip and/or cleft palate in New York City in 1955, it was ascertained that only 8 patients were receiving financial assistance through the medical rehabilitation program of the Bureau for Handicapped Children and were being treated in approved cleft palate clinics. Statistics on incidence, prenatal care, age of parents, associated anomalies, type of care received, and time of surgical repair are included. A brief review of the community program for care of such children and its administration is given.

CLEFT PALATE—STATISTICS

620. Loretz, Wayne (California State Dept. of Public Health, 2151 Berkeley Way, Berkeley 4, Calif.)

A study of cleft lip and cleft palate births in California, 1955, by Wayne Loretz, W. W. Westmoreland, and Lloyd F. Richards. *Am. J. Public Health.* June, 1961. 51:6: 873-877.

From data obtained from California birth certificates for 1955, an analysis of the incidence of cleft lip and cleft palate by sex, race, type of condition, prematurity, birth weight, and other associated congenital malformations was attempted. A ratio of 1.18 cases per 1,000 live births was reported; a higher percentage of males than females had cleft lip and palate and cleft lip only. Incidence of cleft palate only was higher in females. Of total cases reported, 92.7% were in white infants, 3.5% in Negroes. Mortality rate in the 368 infants was high; 15% died within the first 6 months of life. The data collected has possible use for follow-up study of the type and cost of treatment and methods used for obtaining treatment.

ABSTRACTS

CLOTHING

621. U.S. Department of Agriculture

Clothes for the physically handicapped homemaker, with features suitable for all women; prepared by Clarice L. Scott. Washington, D.C., Govt. Print. Off., 1961. 28 p. illus. (Home economics research rep. no. 12)

Special design features and adaptations of clothing to meet the needs of physically handicapped homemakers are illustrated and described. Garment designs are based on principles established by a study reported earlier (see *Rehab. Lit.*, Oct., 1959, #770). The dresses, blouses, skirts, slacks, shorts, indoor wraps, aprons, and chair pockets illustrated have been developed to provide safety, comfort, and freedom of action needed for work efficiency. Only the tailored blouse and wrap-around skirt pictured on p. 10 and 11 are available commercially (*Reader Mail, Inc.*, 243 W. 17th St., New York, N.Y.); other patterns are not.

Single copies of the publication are free as long as the supply lasts from the U.S. Department of Agriculture, Office of Information, Washington 25, D.C., or it may be ordered from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 30¢ a copy.

DEAF—LIPREADING

See 594.

DEAF—PROGRAMS

622. Gallaudet College (Washington 2, D.C.)

Guide lines for the establishment of rehabilitation facilities for the deaf; a special report based on a conference conducted at Fort Monroe, Virginia, October 12-15, 1959; Project director, Powrie V. Doctor. . . . *Am. Annals of the Deaf*. May, 1961. 106:3:341-364.

Professional workers with the deaf, rehabilitation facility personnel, psychiatrists, psychologists, social workers, audiologists, and personnel from the fields of education, rehabilitation, and counseling participated in the Conference, along with some lay workers and deaf persons, to formulate basic concepts of rehabilitation facilities for the deaf and guidelines for their establishment. Discussion group reports served as the basis for recommendations on guidelines; Boyce R. Williams, consultant from the U.S. Office of Vocational Rehabilitation, edited the report. Defined were: the deaf population to be served, what constitutes a rehabilitation facility, the need for such facilities for the deaf, an ideal program for rehabilitation centers for the deaf, physical plant and personnel, financing the center, and interagency relationships. The Conference was made possible by a grant from the Office of Vocational Rehabilitation.

DEAF—SPECIAL EDUCATION

See 589.

DEAF—STUDY UNITS AND COURSES

623. Gallaudet College (Washington 2, D.C.)

Workshop for Catholic personnel for the deaf; a special report based on . . . conducted at . . . March 15, 16, 17, 1961. . . . *Am. Annals of the Deaf*. May, 1961. 106:3: 295-341.

Contains a summary of the program content and discussions at a workshop conference made possible by a grant from the U.S. Office of Vocational Rehabilitation. A wide variety of subjects included: an explanation of vocational rehabilitation services for the deaf, the curriculum content at Gallaudet College and teaching methods used, social, spiritual, and vocational rehabilitation aspects of work for the deaf, and counseling services on marriage and family problems. James M. Quigley, Assistant Secretary, Department of Health, Education, and Welfare, delivered the banquet address on "New Frontiers for the Deaf"; he pointed out service needs that Catholic personnel could help to meet—parent education, improved education for deaf persons, and increasing attention to their social and vocational needs.

DEAF-BLIND—GREAT BRITAIN

624. Rubella Group for Deaf/Blind Children (Gt. Brit.)

Report on conference on children with a combined visual and auditory handicap, at the Royal National Institute for the Blind . . . 7th & 8th January, 1961. 83 p. diags.

Medical, psychological, educational, and parent counseling aspects of work with deaf-blind children were covered in this conference attended by teachers, physicians, social workers, school administrators, and parents. Sponsored by a parent organization, the conference sought to further understanding of the rather special problems of such children and their need for better educational opportunities and facilities, and to promote co-operative efforts among professional persons working with the deaf-blind and their parents.

Copies of the report are available from Mrs. P. Freeman (Hon. Sec.), 63 Horn Lane, Woodford Green, Essex, England, at 3s 6d a copy (approx. 63¢).

DRUG THERAPY

625. Denhoff, Eric (293 Governor St., Providence 6, R.I.)

Relaxant drugs in cerebral palsy: 1949-1960, by Eric Denhoff and Raymond H. Holden. *N. Eng. J. Med.* Mar. 9, 1961. 264:475-480.

Findings of a 12-year research program are reviewed; in 4 of the 8 drugs studied, placebo effect was greater than that of drugs. Conclusions in regard to effectiveness of relaxant drugs in cerebral palsy must be made with caution, the authors believe. Neuromotor and behavioral effects of new relaxant drugs should be rigidly evaluated against placebo responses before drugs are accepted as of value. Requirements for a successful drug in cerebral palsy and the standardized evaluation procedure plan are outlined. Subjects of the study were drawn from Dr. Denhoff's private practice and from preschool children attending the Meeting Street School, Children's Rehabilitation Center, Providence, an Easter Seal facility.

626. Steigmann, Frederick (Cook County Hosp., Chicago 12, Ill.)

Muscle relaxants. *Am. J. Nursing*. July, 1961. 61:7: 49-51.

A review of curariform drugs, cicchona derivatives, and interneuronal acting drugs (central-acting noncurari-

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form), their action on skeletal muscle spasm, and their administration. A table containing the generic and trade names, manufacturer, and approximate dosage of 11 skeletal muscle relaxants is included. Such relaxants are useful in the management of acute muscle spasm secondary to sprains, strains, and trauma, and may be helpful in the management of spasticity in certain neurological and orthopedic disorders.

EMPLOYMENT (INDUSTRIAL)— SOUTH AFRICA

627. Dickerson, G. L. (*Dept. of Labour, Cape Town, S. Africa*)

Placement of handicapped persons in employment. *Rehab. in S. Africa*. Mar., 1961. 5:1:14-19, 26.

Sheltered employment schemes in the Union of South Africa currently serve approximately 1,800 persons, both European and colored. The program, subsidized by the Department of Labour, serves military veterans and civilians. Placement problems, concerned with both sheltered and open labor market employment, are discussed. Job analyses, medical and psychological tests, and co-operative efforts of the Dept. of Labour, other employment services serving the handicapped, and industry aid in successful placement. Also discussed are attitudes of employers toward handicapped workers and the practice of some countries to require compulsory employment of a percentage of handicapped.

This paper was presented at the 20th Conference of the National Council for the Care of Cripples in South Africa.

EXERCISE

628. Ralston, H. J. (*Biomechanics Laboratory, Univ. of California School of Medicine, Los Angeles, Calif.*)

Energy expenditure of patients with motor impairment, by H. J. Ralston, Gregory Bard, and Carrie E. Chapman. *Rehab. Record*. May-June, 1961. 2:3:9-12.

A brief review of energy studies conducted by the University of California School of Medicine's Biomechanics Laboratory since 1957. Energy demands of locomotion in normal persons, amputees, and hemiplegics are compared; findings showed that use of crutches enormously increases the energy requirements of ambulation at any speed. The Laboratory is currently studying energy expenditure in various types of therapeutic exercise, in both normal and hemiplegic patients.

HARD OF HEARING—PROGRAMS

629. Hearing News. May, 1961. 29:3.

Partial contents: State vocational rehabilitation means many things to many people, Craig Mills, p. 6-7.—Procedures in discovering persons with communication problems, Charles M. Ogles, p. 9-12.—How are we meeting the needs of the communicatively handicapped? James C. Teegarden, p. 13-16.

Mr. Mills (*State Dept. of Education, Div. of Vocational Rehabilitation, Tallahassee, Fla.*) discusses services of the rehabilitation counselor in the state vocational rehabilitation agency and agency services specifically geared to needs of the speech and hearing handicapped.

Mr. Ogles (*Am. Hearing Soc.*, 919 18th St., Washington 6, D.C.) quotes statistics from a 3-year Office of Voca-

tional Rehabilitation report to illustrate the extent of the rehabilitation problem with the aurally handicapped. Implications of the findings for improving services for young adults and older persons are considered. Basic fundamentals of a sound casefinding program are outlined.

Mr. Teegarden (*Am. Hearing Soc.*) outlines the desired total program of speech and hearing services that should be available in the community for all age groups and how the program can be administered most effectively.

HEMOPHILIA—PHYSICAL THERAPY

630. Austin, Elizabeth (*California Hosp., 1414 S. Hope St., Los Angeles 15, Calif.*)

Use of physical therapy modalities in the treatment of orthopedic and neurologic residuals in hemophilia, by Elizabeth Austin, Ward Rolland, and Donna Clausen. *Arch. Phys. Med. and Rehab.* June, 1961. 42:6:393-397.

The Hemophilia Clinic of the California Hospital, Los Angeles, began last year to use routine physical therapy modalities of ultrasound, electrical stimulation, and specialized forms of exercise (rhythmic stabilization, stretching, and progressive resistance exercises) to treat bleeding into the joints and orthopedic and neuromuscular residuals of hemophilia. Technics and results in 35 patients treated by these methods are discussed. Four case histories illustrate the benefits to patients. There appears to have been marked reduction of morbidity related to recurrent acute bleeding; it is believed alleviation of weakness and deformity may result in fewer such episodes.

HOMEBOUND—CALIFORNIA

631. Callahan, Enid Bailey (*Rancho Los Amigos Hospital, Downey, Calif.*)

Extending hospital services into the home. *Am. J. Nursing*. June, 1961. 61:6:59-62.

In same issue: Before patients go home, Ada L. Horner and Muriel Jennings, p. 62-63.

A home care plan administered by Rancho Los Amigos Hospital, provides essential medical, nursing, and other hospital services, making it possible for severely disabled patients using respirators to live at home. Those on home care remain patients of the hospital; the comprehensive plan involves most hospital departments. Administrative aspects of the program are discussed; maintenance of mechanical equipment, all provided by the hospital, is a unique feature.

Mrs. Horner (*Rancho Los Amigos Hospital*) and Miss Jennings discuss the comprehensive teaching program for patients, families, and attendant-housekeepers who will be working with patients on the home care plan. Type of instruction is individualized to fit the needs of each patient.

A picture-story of the nurses' role in rehabilitation-oriented nursing at Rancho Los Amigos for postacute and chronically ill patients appears in *R.N.*, June, 1961.

HOMEBOUND—MICHIGAN

632. Sargent, Emilie G. (*Visiting Nurse Service, Detroit, Mich.*)

Evolution of a home care plan. *Am. J. Nursing*. July, 1961. 61:7:88-91.

Based on the experience gained in two major pilot

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studies, the home care plan of the Visiting Nurse Association of Detroit augments its regular public health nursing services with physical therapy, occupational therapy, nutrition, housekeeping, and personal aide services. The agency also supplies sick-room equipment. Administration of the program, costs of home care, future needs, and details of the co-operative Blue Cross patient study are discussed. (For a detailed report of the 4-year Home Care Demonstration, 1955-1959, administered by the Visiting Nurse Association, see digest in *Rehab. Lit.*, July, 1960, #487.)

HOMEBOUND—EMPLOYMENT

633. British Council for Rehabilitation of the Disabled (Tavistock House (South), Tavistock Square, London, W.C. 1, Eng.)

Report on one day conference on the employment problems of the home-bound disabled, held on Friday, December 18th, 1959. . . . *Rehabilitation*. Aug., 1960. (Special edition) p. 3-44.

Contents: Introduction, I. Charley, Chairman.—Employment or diversion, J. T. Gregory.—Tested ideas of employment in occupational therapy, F. B. Silk.—Difficulties in the sale of goods made by disabled homeworkers, E. J. Austin.—Certain psychological and economic problems in the employment of the homebound disabled, R. F. Scott.—The introduction of industrial outwork schemes and the disposal of other work by the homebound, G. W. B. Chambers.—(Question and answer session).

Various homebound employment schemes, their administration, production problems, types of products manufactured, sales outlets, and the question of work centers versus home employment were explored.

See also p. 230.

HOMEBOUND—PROGRAMS

See 591.

HYDROCEPHALUS

634. Schick, Robert W. (300 Longwood Ave., Boston 15, Mass.)

What is arrested hydrocephalus? by Robert W. Schick and Donald D. Matson. *J. Pediatrics*. June, 1961. 58: 6:791-799.

Indications for surgical treatment of early or mild hydrocephalus and the evaluation of treatment in such children are discussed. Four case histories illustrative of slowly progressive hydrocephalus that may be mistaken for arrested hydrocephalus are included. The authors stress the importance of diagnosing and treating hydrocephalus as early as possible in order to minimize brain damage since the sequelae of chronic, mildly increased intracranial pressure during early life may not be evident for several years. As chronological age increases, discrepancy between actual mental ability and what it should be for the age becomes greater and greater. Complete spontaneous arrest occurs only rarely in infancy.

MENTAL DEFECTIVES—CALIFORNIA

635. Ragsdale, Nancy (Children's Hosp., 4614 Sunset Blvd., Los Angeles 27, Calif.)

The child development project, by Nancy Ragsdale,

Sylvia Schild, and Richard Koch. *Calif. Health*. June 1, 1961. 18:23:177-180.

An outgrowth of the Child Development Project of Children's Hospital, Los Angeles, is the provision of a traveling clinic service, demonstrating to professional personnel in the community the ways of meeting needs of the mentally retarded child and his family in his home community. Discussed are: a brief history of the Project and the findings of its longitudinal study of need for services, current work of the Child Development Clinic at the hospital, administration of the traveling clinic, and adaptations in clinic procedures required in 4 areas served, due to geographic or population characteristics. Work of the project will terminate in June, 1962, but a strong base for the extension of such services throughout other counties of California by local health officers has been established.

MENTAL DEFECTIVES—DIAGNOSIS

636. Clausen, Johs. (Training School, Vineland, N.J.)

Electrical sensitivity of the eye in the mentally retarded, by Johs. Clausen and Ratre Karrer. *Training School Bul.* May, 1961. 58:1:3-13.

Investigation of the phosphene threshold at 20 cps sine wave stimulation was undertaken in 55 young mentally retarded persons; in general, retardates were found to have a higher phosphene threshold than normal individuals of corresponding age. In the authors' opinion, this high threshold in retardates is not a secondary manifestation of intelligence level but is a genuine characteristic of the individual. The finding of a relationship between percent alpha and phosphene threshold in organic mental retardates suggests that phosphene threshold is related to central nervous system factors. It is believed that the elevated threshold reflects physiological rather than psychological factors. Based on the study, a working hypothesis has been suggested—that retarded subjects have diminished nerve excitability or faster nerve accommodation.

637. Rigrodsky, Seymour (Training School, Vineland, N.J.)

A study of the incidence, types and associated etiologies of hearing loss in an institutionalized mentally retarded population, by Seymour Rigrodsky, Frances Prunty, and Leon Glovsky. *Training School Bul.* May, 1961. 58:1: 30-44.

Data from a survey at The Training School, Vineland, are reported as to sex, type of loss, chronological age, etiological classification of mental retardation, and possible etiology of loss. A survey of the literature and findings of this study indicated a high incidence of hearing loss in the mentally retarded.

MENTAL DEFECTIVES—MEDICAL TREATMENT

638. Reiss, M. (Neuro-Endocrine Research Unit, Willowbrook State School, Staten Island 14, N.Y.)

Investigations into the interrelation of physical and mental retardation, by M. Reiss (and others). *J. Neuropsychiatry*. Jan.-Feb., 1961. 2:3:109-137.

In an investigation of 102 patients at Willowbrook, results of biochemical, endocrinological, physical, and

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psychiatric tests, found before and after treatment, were co-ordinated and compared. Subjects were physically and mentally immature (functioning mainly at the moron level). Case histories of 10 boys representative of the group are reported; implications of their treatment with chorionic gonadotropin (Follutein) and triiodothyronine (Cytomel) are discussed. The type of endocrinological symptoms seen in these patients led to a general diagnosis of hypopituitarism as the probable primary cause of physical retardation. From the findings the authors assume a correlation between pituitary underfunction and mental retardation. Further studies will be reported at a later date.

MENTAL DEFECTIVES— PSYCHOLOGICAL TESTS

639. Fisher, Gary M. (*Pacific State Hosp., Box 100, Pomona, Calif.*)

Comparability of intelligence quotients of mental defectives of the Wechsler Adult Intelligence Scale and the 1960 revision of the Stanford-Binet, by Gary M. Fisher, Beverly A. Kilman, and Anna M. Shotwell. *J. Consulting Psych.* June, 1961. 25:3:192-195.

Subjects were 180 adult hospitalized retardates of the age range 18 to 73 with a diagnosis of familial mental retardation. In addition, a measure of social competency was related to the IQ's from the two scales. Age, but not level of retardation, was found to be significant in determining the magnitude of the difference between WAIS and Stanford-Binet IQ's. WAIS IQ's averaged 15 and 23 points higher than Stanford-Binet IQ's for those 18-54 years of age and 55-73 years of age, respectively.

640. Holowinsky, Ivan (*Training School, Vineland, N.J.*)

The relationship between intelligence (80-110 I.Q.) and achievement in basic educational skills. *Training School Bul.* May, 1961. 58:1:14-21.

The finding of considerable variability in reading and arithmetic achievement within a given grade placement appears to contradict the traditional assumption that all students within ranges of dull-normal and average intelligence should progress one grade each calendar year. Subjects of the study were students between the ages of 12 and 17. The findings of the study may be of significance in relation to classroom procedures and their effect on educational growth and on the granting of high school diplomas as a result of an accumulation of credits. Several areas for further research on educational growth are suggested.

MENTAL DEFECTIVES— SPECIAL EDUCATION—ILLINOIS

641. Mullen, Frances A. (*Chicago Public Schools, 228 N. LaSalle St., Chicago 1, Ill.*)

The value of special classes for the mentally handicapped; regular classes can serve some classified as EMH, by Frances A. Mullen and William Itkin. *Chicago Schools J.* May, 1961. 42:8:353-363.

A summary of the research findings of a 4-year study conducted by the Chicago Board of Education under a grant from the U.S. Office of Education (*Cooperative Research Project SAE 6529*). For a news item concerning the 6-volume report, see *Rehab. Lit.*, May, 1961, p. 164.

Dr. Mullen served as co-ordinator of the project and Dr. Itkin as project director. Questions considered in this article are: the value of special classes for the mentally handicapped, the academic achievement and social adjustment of educable mentally handicapped children placed in special classes as compared to regular classes, and the kinds of children who profit from special placement.

MENTAL DISEASE

642. Brooks, George W. (*Vermont State Hosp., Waterbury, Vt.*)

Effective use of ancillary personnel in rehabilitating the mentally ill. *Texas State J. Med.* May, 1961. 57: 5:341-347.

Successful rehabilitation of patients with chronic schizophrenia treated over the past 6 years at the Vermont State Hospital is credited to a flexible and varied program of drug treatment, resocialization and educational therapy, treatment of psychic and physical disorders, and after-care following the patients' return to the community. The project at Vermont State Hospital has conducted the treatment program with existing equipment and staff, with but few additions. Objectives of patient care are to ameliorate their reality problems, educate, train, and strengthen their ego, and help them to work through their intense inner conflicts with parent figures. Continued support and follow-up after discharge enables patients to maintain the benefits of rehabilitation. Dr. Brooks was joint author of the Article of the Month, *Rehab. Lit.*, June, 1961 (p. 166), on research aspects in rehabilitation of the mentally ill.

See also 590.

MUSCLES—TESTS

643. Beasley, Willis C. (*Biophysics Research Laboratory, Natl. Institutes of Health, Bethesda 14, Md.*)

Quantitative muscle testing; principles and applications to research and clinical services. *Arch. Phys. Med. and Rehab.* June, 1961. 42:6:398-425.

A discussion of the development and standardization of an adaptable system of instrumentation for measuring and recording features of integrative neuromuscular action through the associated effects in muscular responses. Approaches used in research on normal and abnormal aspects of muscular strength levels, fatigability, and response of muscles to passive stretch are described. Specific examples of how measurements of maximum force level on normal and postpoliomyelitic patients have been applied to the development of simple methods for computing percentage level of paresis are included. The author explains the application of these statistical norms to the interpretation of clinical and epidemiologic estimation of paresis due to poliomyelitis. Extensive research has been conducted over the past 15 years by Dr. Beasley, who is currently director of the Biophysics Research Laboratory. (See also *Rehab. Lit.*, Mar., 1956, #321, and Jan., 1957, #84.)

NEUROLOGY

644. Dowben, Robert M. (*303 E. Chicago Ave., Chicago 11, Ill.*)

Diagnosis and treatment of muscle diseases; current

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concepts in the diagnosis and treatment of muscular dystrophy and other diseases of muscle. *Arch. Internal Med.* Mar., 1961. 107:430-446.

This review article includes a classification of diseases of skeletal muscle, with a discussion of diagnostic technics, the clinical symptoms and genetic aspects of various forms of muscular dystrophy, and the characteristics of other inflammatory diseases of muscle that often mimic muscular dystrophy so closely that differentiation is made exceedingly difficult. 79 references.

645. Perlstein, Meyer A. (4743 N. Drake Ave., Chicago 25, Ill.)

Electromyographic studies in myopathies and related conditions, by Meyer A. Perlstein, Marcos Turner, and Harry Elam. *Arch. Phys. Med. and Rehab.* June, 1961. 42:6:447-457.

Electromyographic findings in 53 patients with muscular dystrophy (33), poliomyelitis sequelae (11), and cerebral palsy (9) are compared. The present observations are at variance in some respects with those of earlier published reports. The authors believe it is possible to classify roughly many of the neuromuscular conditions on an electromyographic basis; the electromyographic examination has definite clinical value when done by an experienced person. In patients with early muscular dystrophy, electromyography is considered much more valuable for diagnostic purposes than muscle biopsy.

NURSERY SCHOOLS—DIRECTORIES

646. Alexander Graham Bell Association for the Deaf (1537 35th St., N.W., Washington 7, D.C.)

Schools and classes for deaf children under six. *Volta Rev.* June, 1961. 63:6:272-281.

A list of current facilities for preschool children under 6 years with severe hearing impairment, compiled from data obtained in a 1961 survey of all states in the U.S. and the provinces of Canada. The more than 300 facilities supplied information on location, type of school, entrance age, and types of handicapped children accepted. Some schools admit children with conditions diagnosed as aphasic or mentally retarded and deaf or who have multiple handicaps in addition to deafness; schools that do not accept hard of hearing children are also indicated. Some additional information on individual schools is provided in the footnotes. Listing is alphabetical, by state and province.

NURSING

See 593.

NUTRITION

647. Kaplan, Jerome (55 Marion Ave., Mansfield, Ohio)

Social components of meals on wheels service, by Jerome Kaplan and Constance K. Williams. *Gerontologist*. Mar., 1961. 1:1:51-55.

Meals on wheels services for homebound older persons have been offered in the U.S. only since 1954; at present there are 14 known programs in operation in various parts of the country. Mr. Kaplan, executive director of Mansfield Memorial Homes, a foundation serving older per-

sons, describes the general aspects of such programs and, in more detail, discusses the administration of Mansfield's program, begun in 1959. In addition to providing adequate and individually planned meals, where necessary, the service offers 5 auxiliary benefits—casework treatment for personal and social adjustment problems, housing service, financial counseling, housekeeping, and companion service. Case histories illustrate the values of the program. Although most of the programs are initiated by voluntary organizations and citizens' groups, the professional social worker is best fitted to understand and cope with problems presented by the older homebound or chronically ill users of meals on wheels services.

OLD AGE

See 586; 663.

ORTHOPEDICS

648. Orthopedic problems in medical practice; a symposium. *J. Chronic Diseases*. June, 1961. 13:6:469-560.

Contents: Introduction, Allen F. Voshell and J. Vernon Luck, Special Editors.—How can the modern orthopedic surgeon help the general practitioner in the treatment of chronic disease? Leo Mayer.—Disabling fractures in the aged, Edgar M. Bick.—Some problems of neuromuscular diseases with advancing years, Thomas Gucker, III.—Osteoarthritis, William J. Tobin.—Cerebral palsy, William Cooper.—Interpretation of the limp, James P. Ahstrom, Jr.—Late results—good and bad—in the treatment of injuries to athletes, Don H. O'Donoghue.—Rehabilitation of the chronically disabled, Robert Mazet, Jr., and Jacqueline Perry.

Copies of this issue are available from C. V. Mosby Co., 3207 Washington Blvd., St. Louis 3, Mo., at \$2.00 each.

PARALYSIS AGITANS—MEDICAL TREATMENT

649. Eyres, Alfred E. (Eastland Center-Professional Bldg., 17800 E. Eight Mile Rd., Detroit 36, Mich.)

Paralysis agitans syndrome; a report on the results of testing and treatment with high frequency (sedac) currents, by Alfred E. Eyres, Josephine Knight, and Reuben Reiter. *J. Mich. State Med. Soc.* June, 1961. 60:6:775-782.

A brief description of the high frequency (sedac) currents and instrumentation producing them, with a more detailed account of their use in a treatment project involving 11 patients with paralysis agitans. Treatment technics and results achieved are discussed. Although high frequency currents were introduced into medicine only 5 years ago, it is believed that they may eventually be recognized as having a place in treatment of paralysis agitans.

650. Titrud, Leonard A. (929 Med. Arts Bldg., 825 Nicollet Ave., Minneapolis 2, Minn.)

Chemopallidectomy and chemothalamectomy in the treatment of parkinsonism. *J. Lancet*. Feb., 1961. 81:2: 54-57.

Data on 14 patients with parkinsonism who underwent either unilateral (9) or bilateral (5) chemopallidectomy and chemothalamectomy are tabulated. Clinical data on 4 patients with diagnosis of kernicterus (2), dystonia

musculorum deformans, and cerebral palsy (1 each) are also included. For the most part the technics outlined by Drs. Cooper and Bravo were used. Selection of patients and beneficial results are discussed. Chemothalamectomy, at present, appears to be a practical neurosurgical procedure that can be used in general clinical practice in most hospitals to reduce substantially crippling rigidity and tremor or basal ganglion disease.

PARAPLEGIA

See 616; 652.

PHYSICAL EFFICIENCY

651. Asmussen, Erling (*Danish Natl. Assn. for Infantile Paralysis, Hellerup, Denmark*)

Evaluation of fitness for work from pulse increase and speed, by Erling Asmussen (and others). *Communications from Testing and Observation Institute, Danish Natl. Assn. for Infantile Paralysis*. 1961. 9:3-10.

Describes the development of a test that would provide the means for expressing the physical fitness of handicapped persons as a percentage of the fitness of a normal person performing the same kind of standard work. Data used in plotting the physical fitness profile can be easily obtained during the standard work test.

Communications, published at irregular intervals, is sent free on request to interested persons; supply is limited, however.

652. Bell, Esther (*Texas Rehab. Center, Gonzales Warm Springs Foundation, Gonzales, Tex.*)

Muscle strength and resultant function in cervical cord lesions, by Esther Bell, Rose M. Elliott, and Odon F. Von Werssowetz. *Am. J. Occupational Ther.* May-June, 1961. 15:3:106-109.

Two charts for use in quickly assessing muscle strength and possible skills in quadriplegic patients with cervical cord lesions are illustrated and described. The skills listed for each of 5 groups represent the potential goals of rehabilitation for patients thus classified. Success in rehabilitation will depend, however, on use of the proper types of orthoses, adequate training, and the initiative and interest of the patient. Factors that limit or change goals to be achieved are discussed. Characteristics of involvement of patients falling within the 5 groups are outlined.

See also 628.

PHYSICAL THERAPY

See 592.

PHYSICAL THERAPY—ADMINISTRATION

653. Foundas, John C. (*VA Hosp., Miles City, Mont.*)

Emergency care in a physical therapy section, by John C. Foundas and Walter J. Schmidt. *Phys. Therapy Rev.* June, 1961. 41:6:415-421.

Physical therapists working in the small general hospital should be aware of recommended technics of first aid for use in an emergency until the attending physician arrives. Basic contents of the first aid kit, simple first aid measures for a wide variety of emergencies, and new technics in artificial respiration are discussed.

PSYCHOLOGICAL TESTS

654. Levi, Aurelia (*Columbia Univ., Teachers Coll., New York, N.Y.*)

Orthopedic disability as a factor in human-figure perception. *J. Consulting Psych.* June, 1961. 25:3:253-256.

Perceptual reactions of 3 physical disability groups and a group of nondisabled controls to a structured test involving resemblances among schematized human-figure drawings were compared to test the hypothesized one-to-one relationship between the physical body and the body image. Subjects with arm or leg disability appeared to be particularly sensitive to arms or legs in a drawing; those with low back ailments appeared to be closer to the non-disabled controls in their reactions than did the other 2 groups. Findings are considered as supporting the hypothesized one-to-one relationship. The testing instrument and methods for its use are discussed.

PSYCHOLOGY

655. Ayres, A. Jean (*Univ. of Southern California, Los Angeles 7, Calif.*)

Development of the body scheme in children. *Am. J. Occupational Ther.* May-June, 1961. 15:3:99-102, 128.

When awareness of the body's configuration and how its different segments are interrelated in motion is faulty, the individual often cannot accomplish skilled, purposeful movement. Although there are no known standardized tests to determine body scheme deficiency in children, there are several procedures to be used in subjective evaluation of amount of development or degree of deficiency. Miss Ayres discusses such procedures briefly and offers suggestions on training methods, based on increasing the flow of sensory impulses, developing conscious knowledge of body parts and their basic movements, and on association of sensation and conscious knowledge through simple gross meaningful motor tasks.

REHABILITATION—MOROCCO

656. Dunsford, Frances

Aid for Moroccan paralysis victims; half-yearly report. *Australian J. Physiotherapy*. Mar., 1961. 7:1:5-8.

In same issue: With the International Red Cross in Morocco, Beatrice E. Burke, p. 8-13.

A condensed version of Miss Dunsford's report to the Australian Red Cross Society on her work as a physical therapist in the treatment of Moroccan victims of trichloro phosphate poisoning. The report covers the period of January to June, 1960, and includes details of the treatment procedures and results of muscle testing.

Miss Burke (*Poliomyelitis Div., Dept. of Health, Victoria, Australia*) describes the administrative aspects and some of the therapeutic problems of the Moroccan aid plan. Local conditions and customs complicated the organization of services to 10,000 long-term patients. (For other articles on the Moroccan crisis, see *Rehab. Lit.*, Mar., 1961, #230, and Feb., 1961, #151.)

REHABILITATION—ADMINISTRATION

657. The handicapped. *Lancet*. June 10, 1961. 7189: 1271-1272.

With the decline of debilitating infections of childhood

ABSTRACTS

and the success of life-saving measures in infancy, more children with multiple handicaps are in need of special services and educational facilities to meet their needs. This editorial suggests several means of providing continuity of care; if clinics are to provide care, they must work with the family doctor, who bears the final responsibility for the child. Regularly held clinics would provide the family doctor with a source for expert help for the initial assessment and periodic reviews of the child's treatment and care.

See also 591; 600; 622; 629; 632; 642.

REHABILITATION—EQUIPMENT

See p. 241; 660.

REHABILITATION— STUDY UNITS AND COURSES

See 593.

REHABILITATION—SURVEYS—OKLAHOMA

658. Oklahoma. State Legislative Council

Study of rehabilitation services, 1959-1960. Oklahoma City, The Council, 1960. 48 p. illus., tabs. (Project no. RD552-60)

This report of the comprehensive survey and analysis of present rehabilitation programs in Oklahoma is the co-operative effort of 12 state and 12 private agencies. An objective of the project, supported by a grant from the U.S. Office of Vocational Rehabilitation, was to illustrate a practical method for evaluating and correlating rehabilitation efforts. Data on the social and economic effects of disability (costs of state and federal services to the disabled in Oklahoma), the estimated number needing vocational rehabilitation, services of various state agencies to adults and children, preventive work of state agencies, and a brief discussion of the work of private organizations and agencies are included.

Although only a limited supply of the publication is available, single copies will be distributed to those having specific use for the study. Requests should be sent to U.S. Office of Vocational Rehabilitation, Washington 25, D.C. A summary of the final report is also available from the Office of Vocational Rehabilitation, as reported in their *Rehab. Service ser. no. 563*, April 26, 1961.

SHELTERED WORKSHOPS—ADMINISTRATION

See p. 230.

SPECIAL EDUCATION—PERSONNEL

659. U. S. Office of Education

Teachers of crippled children and teachers of children with special health problems; a report based on findings from the study "Qualification and preparation of teachers of exceptional children"; prepared by Romaine P. Mackie (and others). Washington, D.C., Govt. Print. Off., 1961. 124 p. illus., tabs., graphs, forms. (Bul. 1960, no. 21) (OE-35018)

Competencies needed by teachers of crippled children and children with special health problems, especially in such settings as day class, home, or hospital programs, have been evaluated. The findings should be of value to

present and prospective teachers, and to those concerned with professional standards and college curricula in these two areas. This publication follows the format of others in the series, based on the U.S. Office of Education's broad study of qualification and preparation of teachers for all special education areas.

Available from U.S. Superintendent of Documents, Government Printing Office, Washington 25, D.C., at 50¢ a copy.

SPEECH CORRECTION—EQUIPMENT

660. Jones, Morris Val (School for Cerebral Palsied Children, Merced Blvd. and Winston Dr., San Francisco 27, Calif.)

Electrical communication devices. *Am. J. Occupational Ther.* May-June, 1961. 15:3:110-111.

Mechanized equipment to aid the severely handicapped, nonverbal cerebral palsied is illustrated and described briefly. Devices include a communication display panel with electrically driven pointer, an electromechanical machine for attaching to an electrical typewriter (the Visually Indicating Single Impulse Typer), and electronically controlled Magnytyper. These communication aids are only the beginning; experimentation will continue to produce more efficient electrical and electronic devices for use by the cerebral palsied.

SPEECH CORRECTION—PARENT EDUCATION

See 595.

TYPING

661. Butterworth, Marjorie Sinclair

Touch typewriting with one hand for handicapped students. Regina, Sask., Canada, Co-ordinating Council on Rehabilitation, n.d. 17 p. illus. Mimeo.

Typing teachers attempting to teach one-hand typing to handicapped students (those with missing fingers or a crippled arm) will find this manual of instructions in the touch system of value. With the guide row placed in the center of the keyboard and diagonal keys to right and left of the guide position built up with rubber keytops, most handicapped students can learn to take the whole keyboard by touch, with either hand. Included are the usual drills, adapted to the method. Of the 7 students so trained, 3 or 4 have achieved a rate of 40 words per minute.

The manual has been reproduced by the Co-ordinating Council on Rehabilitation, 416 Health and Welfare Bldg., Regina, Saskatchewan, Canada, for distribution by the Council.

VOCATIONAL GUIDANCE

662. New York University Medical Center. Department of Physical Medicine and Rehabilitation (400 E. 34th St., New York 16, N.Y.)

Pre-vocational therapy demonstration in a general hospital and a rehabilitation center; report to the National Advisory Council on Vocational Rehabilitation and the Office of Vocational Rehabilitation. . . . New York, The Dept., 1960. 48 p. tabs. (SP-234)

Analysis of experiences with prevocational exploration units at the Institute of Physical Medicine and Rehabilitation and the Physical Medicine and Rehabilitation Service

EVENTS AND COMMENTS

of Bellevue Hospital, New York City, leads to the conclusion that their value is less in general hospitals and medically oriented rehabilitation centers than in the vocationally oriented center. The work sample testing unit is feasible, however, for a large general hospital with a sizeable outpatient department. This report, covering more than 2 years' experience in both units, provides background information on the project, establishment and administration of the units, roles of the vocational counselor and occupational therapist, and some of the problems encountered. Data on results achieved with patients are included.

VOLUNTARY HEALTH AGENCIES

663. Ryan, Philip E. (*Natl. Assn. for Mental Health, 10 Columbus Circle, New York 19, N.Y.*)

Role of voluntary health agencies in planning to meet the health needs of older persons. *Am. J. Public Health*. June, 1961. 51:6:878-882.

Distinguishing characteristics of voluntary health agencies are defined and the scope of their activities discussed briefly. Basic and applied research support, education (public, professional, and patient and family), and patient or community service are included in their programs. Many voluntary agencies are concerned with conditions increasingly reflected in the disabilities of aging and are contributing their efforts to meeting the health needs of older persons. Health councils at the national, state, and local level are a resource for helping all organizations work co-operatively in solving the problems of the aging. Mr. Ryan's paper was presented at the Twelfth Annual Conference on Aging, University of Michigan, 1959.

Events and Comments

New York State Buildings To Be Modified for Access by Disabled

GOV. NELSON A. ROCKEFELLER recently directed that all buildings owned by the State of New York now and in the future be modified for easy access by the physically handicapped. This policy follows a 1961 recommendation of the Governor's Council on Rehabilitation and the Inter-departmental Health and Hospital Council.

The Governor has requested the State Department of Public Works to include such features as gently sloping ramps, ground-level entrances, automatic treadle door openers, and handrails in plans for all new state structures. The Department will survey existing structures to determine steps to be taken to provide such features.

The handicapped having business with state agencies will be enabled to make personal visits, and wider employment by the state of those with ambulatory impairments will be permitted.

Use of Aids and Appliances By Handicapped Reported

THE NATIONAL HEALTH SURVEY reported in June the distribution and use in the U.S. of hearing aids, wheel chairs, and braces and artificial limbs. In the period July, 1958, to June, 1959, 1,161,000 persons were estimated to have hearing aids. This represents 1 out of 5 of those estimated to have hearing impairment by this survey of civilian, noninstitutionalized persons. More females than males had aids, as did persons in urban areas compared to rural. The latter differ-

ence increased with age of the persons surveyed.

During the survey period about 253,000 persons had wheel chairs, 54 percent being confined to the house except for emergencies.

Leg or boot braces were used by an estimated 201,000 persons, and other types of braces by 494,000. About 82,000 of the leg or foot braces were reported for those under age 15, about three fourths of which were worn because of postpoliomyelitic or congenital conditions.

About half of the 274,000 persons reported as lacking a major extremity had an artificial limb—an estimated 139,000 persons, of whom 132,000 were males. About 106,000 persons had an artificial leg or foot.

The report *Health Statistics from the U.S. National Health Survey; Distribution and Use of Hearing Aids, Wheel Chairs, Braces, and Artificial Limbs, United States, July, 1958-June, 1959* (Public Health Service Pubn. no. 584-B27) is available from the U.S. Superintendent of Documents, Washington 25, D.C., at 25¢ a copy.

New Rehabilitation Journal Being Published in Brazil

A QUARTERLY journal *Revista Brasileira de Reabilitação* was initially issued in September of 1960. Summaries of articles are given in English; a few articles are in English with Portuguese summaries. The editor is José Pessoa C. de Oliveira; editorial and business offices are at Rua Real Grandeza, 255, Botafogo, Rio de Janeiro, Estado da Guanabara, Brasil. The price for four issues is \$5.00.

A Comment on

Board Member Responsibility

“AFTER ELECTION to the Board of the New Haven VNA, a director would receive a description of his job formulated by Mr. Michael Davis in 1927 into the following ten points:

1. To know why the organization exists and annually to review why it should.
2. To govern a board or a committee through joint thinking, not by majority vote.
3. To give money, or help get it, or both.
4. To face budgets with courage, endowments with doubt, deficits without dismay, and to recover quickly from a surplus.
5. To deal with the professional staff as partners.
6. To keep far enough ahead of the community to be progressive and close enough to it to be practical.
7. To interpret health work to the public in words of two syllables.
8. To deal with physicians on the assumption that the highest ideals of the profession dominate its every member and to face difficulties with recognition that both doctors and board members are human.
9. To be proud of a tradition but eager to improve it.
10. Always combine a New England sense of obligation with an Irish sense of humor.”

—From *To Meet the Need; Being an Account of the Growth and Activities of the Board Members Organization of Connecticut Public Health Nursing Agencies; Its First 40 Years, 1919-1959*, by Evelyn Whittemore Woods, p. 21-22. Privately printed in 1961 by the Board Members Organization of Connecticut Public Health Nursing Agencies, Box 1450, 80 Crown St., New Haven 6, Conn. 131 p. \$1.00.

EVENTS AND COMMENTS

Office of Education Appoints Speech and Hearing Consultant

NANCY E. WOOD was recently appointed specialist in speech and hearing disorders for the U.S. Office of Education. In 1952 she received her Ph.D. degree from Northwestern University. Prior to her present assignment Dr. Wood was an associate professor, Western Reserve University, Cleveland, and director, program for children with language disorders, Cleveland Hearing and Speech Center.

Federal Activities on Behalf Of Aging Show Expansion

THE SENATE Special Committee on Aging has named Harold L. Sheppard as its staff director. Senator Pat McNamara is committee chairman. The U.S. Office of Vocational Rehabilitation has appointed Miss S. Roberta Church of Memphis, Tenn., as OVR consultant on rehabilitation of the aging disabled.

In *Activities of the National Institutes of Health in the Field of Gerontology, January, 1961* (Pubn. no. 841), the U. S. Public Health Service has provided a classified listing of projects conducted or supported by the NIH for 1960 and 1961. The title of each study and the researcher and institution involved are identified. Further background information is supplied in the companion report *Research Programs in Aging . . . During 1960* (Pubn. no. 836).

Both reports were prepared by the Center for Aging Research, the NIH co-ordinating office established in the fall of 1956 as a branch of the Division of General Medical Sciences. The Center reports that extramural research grants relating to aging, as of Jan. 31, 1961, have risen to 700 in number and a value of \$16,234,564. Public Health Service Publication no. 841 is available from U.S. Superintendent of Documents (Washington 25, D.C.) at 35¢ a copy, and Publication no. 836 at 15¢ a copy.

A Comment on

A Key Factor That Interferes With Successful Rehabilitation

WE ARE LESS INCLINED than we were previously, to look upon such things as the age of a patient, his intellectual ability, his educational achievements, and many of the other variables examined in this Project, as major clues to the ultimate 'success' or 'failure' of a patient. These are the easiest factors to take into consideration but apparently not the most reliable. On the other hand we feel that in our data we have obtained a preliminary glimpse into one of the many factors of an emotional nature which loom important in rehabilitation. In this instance it was the dependency feelings of the patient. We are convinced that it is in this direction that

we must look for the knowledge which will further enhance our effectiveness in the field of rehabilitation."—*From Vocational Potentials of Hospitalized Patients with Chronic Disabilities; Final Report: Project Grant No. 259, by Gaylord Hospital and Sanatorium, Wallingford, Conn. 1961. 97 p. Mimeo.*

Taxicab Company Serves Only Wheel Chair Riders

IN DENVER, Colorado, probably the nation's first cab service for persons in wheel chairs has been initiated. Twenty-five taxis were converted by Chair Cabs, Inc., from 1961 station buses. Only the front seat has been retained, and the space behind has been provided with brackets to keep the wheel chairs in place. A loading ramp also has been added to each. All drivers of the cabs are trained to handle wheel chairs.

A Comment on

Use of Rehabilitation Facilities by State DVR's

"RECOMMENDED GUIDELINES for Action by the State Vocational Rehabilitation Agency:

1. Exercise a strong leadership role in the development and utilization of facilities.
2. Serve more of the severely handicapped.
3. Formulate a realistic plan for the development and utilization of facilities.
4. Establish the position of facilities specialist on the State Staff.
5. Adopt a positive attitude toward the State agency operated facility.
6. Conduct a continuing program of community relations in the facilities field.
7. Budget for the development and utilization of facilities.
8. Develop criteria for the utilization of facilities."

—*From Proceedings of Seminar on the Role of the State Vocational Rehabilitation Agency in the Development and Utilization of Rehabilitation Facilities, Washington, D.C., October 24-26, 1960, edited by William A. Massie, U.S. Office of Vocational Rehabilitation. (1961) 30 p. ("Rehabilitation Facilities Seminars for the 1960's" ser., no. 1)*

New Page-Turner Marketed

A NEW AUTOMATIC page-turner is being manufactured and sold directly by the P.B.S. Supply and Manufacturing Co. (1321 Aloha St., Seattle, Wash.). The manufacturer states that the "Touch-Turner," designed to give a broad range of reading at a low price (\$37.50), runs on two flashlight cells, has only two adjustments, and is less than 1 foot square, with a weight of less than 4 pounds. Condensed type magazines, such as *Reader's Digest* and *Pageant*, and pocket-size books only are handled by the page-turner.

Research Seminar Being Held on Mental Retardation

SUPPORTED BY the University of Wisconsin and the Cooperative Research Program of the U.S. Office of Education, an invitational research seminar on mental retardation is scheduled at the University from August 15 through August 30. Twelve leaders in the field will exchange ideas with the purpose of generating new thoughts to be used by investigators conducting research. The participants are:

William I. Gardner, associate professor, department of psychology, University of Mississippi

Herbert Goldstein, associate professor, Institute for Research on Exceptional Children, University of Illinois

Richard F. Heber, coordinator, special education, University of Wisconsin

Joseph Jastak, director, Guidance Associates, Wilmington, Dela.

Herschel W. Nisonger, Columbus (Ohio) State School

Joseph J. Parnicky, superintendent, Johnstone Training Research Center, Borden-town, N.J.

Harold R. Phelps, director, division of special education, Illinois State Normal University

Maynard C. Reynolds, professor, educational psychology, University of Minnesota

Sophia T. Salvin, principal, Washington Boulevard School for Multiple Handicapped Children, Los Angeles

Richard L. Schiefelbusch, director, Bureau of Child Research, University of Kansas

Harold W. Stevenson, director, Institute of Child Development, University of Minnesota

Edward F. Zigler, assistant professor, department of psychology, Yale University

Results of this seminar, the first of a series planned by the Cooperative Research Branch, will be reported in publications of the U.S. Office of Education and in other professional journals.

A Comment on

Advances in Prosthetics

"IT WOULD BE DIFFICULT to identify another phase of medical practice which has been subjected to as much continuous change as has the management of amputees in the last ten years. It is estimated that ten years ago less than 20% of prostheses were ordered on a medical prescription, whereas today less than 20% are not. Progress in prosthetics is sharply emphasized when it is recalled that the prosthetist of ten years ago would be at a loss to fill a present day prescription for a prosthesis."

—*From Introduction to Follow-up Study of Amputees Served by a Prosthetic Team, Allen S. Russek, M.D., Project Director, Department of Physical Medicine and Rehabilitation, New York University Medical Center. 1961. Mimeo.*

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